

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

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-015324**Date Inspected:** 30-Jun-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:** Gao Zhi Chun  
**Inspected CWI report:** Yes No N/A  
**Electrode to specification:** Yes No N/A  
**Qualified Welders:** Yes No N/A  
**Approved Drawings:** Yes No N/A

**CWI Present:** Yes No  
**Rod Oven in Use:** Yes No N/A  
**Weld Procedures Followed:** Yes No N/A  
**Verified Joint Fit-up:** Yes No N/A  
**Approved WPS:** Yes No N/A  
**Delayed / Cancelled:** Yes No N/A

**Bridge No:** 34-0006**Component:** Tower & OBG Components**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

BAY#10

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 3B located on Lift-5 Splice Plate Stiffener SSD1 – SPSA5 – 13. Welder is identified as 050289. ZPMC Quality Control (QC) Inspector is identified as Yuan Hui Gang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

Weld joint # 1A located on Lift-5 Splice Plate Stiffener NSD1 – SPSA5 – 13. Welder is identified as 052493. ZPMC Quality Control (QC) Inspector is identified as Yuan Hui Gang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

Repair welding of a weld joint # 41B located on North tower Lift-5 NSD1 – TL5 – 3B/F. Welder is identified as 052930. ZPMC Quality Control (QC) Inspector is identified as Gao Zhi Chun. The welding variables recorded by QC appeared to comply with the WPS – 485 – SMAW – 3G (3F) – Repair – 1. (See attached photo)

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Repair welding of a weld joint # 24A located on North tower Lift-5 NSD1 – TL5 – 3B/F. Welder is identified as 056200. ZPMC Quality Control (QC) Inspector is identified as Gao Zhi Chun. The welding variables recorded by QC appeared to comply with the WPS – 485 – SMAW – 3G (3F) – Repair – 1.

BAY#11

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 006090

Ultrasonic Testing (UT)

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as Tower Component. The weld designations reviewed are as follows:

SPLICE PLATE STIFFENER LIFT-5

ESD1 – SPSA5 – 2 – 1A/B – Green Tag# 12706

WSD1 – SPSA5 – 2 – 1A/B – Green Tag# 12707

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 4A located on Lift-5 Splice Plate Stiffener ESD1 – SPSA5 – 7. Welder is identified as 046709.

ZPMC Quality Control (QC) Inspector is identified as Xu Jie. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

Weld joint # 1A located on Lift-5 Splice Plate Stiffener ESD1 – SPSA5 – 20. Welder is identified as 040611.

ZPMC Quality Control (QC) Inspector is identified as Xu Jie. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

Weld joint # 1A located on Lift-5 Splice Plate Stiffener WSD1 – SPSA5 – 12. Welder is identified as 046704.

ZPMC Quality Control (QC) Inspector is identified as Xu Jie. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

Weld joint # 1A located on Lift-5 Splice Plate Stiffener ESD1 – SPSA5 – 12. Welder is identified as 040614.

ZPMC Quality Control (QC) Inspector is identified as Xu Jie. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

ORTHOTROPIC BOX GIRDER (OBG) LIFT-13 AT BAY#11

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Tack welding of a weld joint # 15 located on Side plate SP3108 – 001. Welder is identified as 057258. ZPMC Quality Control (QC) Inspector is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2112. (See attached photo)

Submerged Arc Welding (SAW):

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Weld joint # 97 located on Side Plate SP3068 – 001. Welder is identified as 040699. ZPMC Quality Control (QC) Inspector is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2221 – B – L2c – S – 2.

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 Michael Ng - 15921845703, who represents the Office of Structural Materials for your project.

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**Inspected By:** Kumar,Sandeep

Quality Assurance Inspector

**Reviewed By:** Clifford,William

QA Reviewer

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