

**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-018948**Date Inspected:** 03-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:** Xu Le Feng**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 & 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

Fluxcored Arc Welding (FCAW):

Weld joint # 23A located on Lift-6 tower head component SSD1 – FFSA6 – 1. Welder is identified as 052075. ZPMC Quality Control (QC) Inspector is identified as Deng Zhi Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – B – U2 – F. (See the attached photo)

Weld joint # 08 located on Lift-6 tower head component SSD1 – FDSA6 – 1. Welder is identified as 057258. ZPMC Quality Control (QC) Inspector is identified as Deng Zhi Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

Weld joint # 23A located on Lift-6 tower head component SSD1 – FFSA6 – 1. Welder is identified as 040533. ZPMC Quality Control (QC) Inspector is identified as Deng Zhi Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – B – U2 – F.

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## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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Weld joint # 04 located on Lift-6 tower head component SSD1 – FDSA6 – 1. Welder is identified as 040533. ZPMC Quality Control (QC) Inspector is identified as Deng Zhi Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

Sub-merged Arc Welding (SAW):

Weld joint # 23A located on Lift-6 tower head component SSD1 – FFSA6 – 1. Welder is identified as 040460. ZPMC Quality Control (QC) Inspector is identified as Deng Zhi Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2221 – B – L2c – S – 2.

ORTHOTROPIC BOX GIRDER (OBG) AT BAY#10

This QA Inspector observed the following work in progress

Fluxcored Arc Welding (FCAW):

Weld joint # 02 located on Bike Path BK004A6 – 029. Welder is identified as 052493. ZPMC Quality Control (QC) Inspector is identified as Yu Zhi Lai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2312 – Tc – P4. (See attached photo)

Weld joint # 130 located on Bike Path BK004A8 – 029. Welder is identified as 500365. ZPMC Quality Control (QC) Inspector is identified as Yu Zhi Lai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2313 – Tc – P4.

BAY#11

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 007597

Ultrasonic Testing (UT)

This QA inspector performed UT 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 designation reviewed as follows:

LIFT-6, TOWER

WSD1 – FFSA6 – 4 – 23A/B

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 38 located on Lift-4 East tower skin 'E' ladder support ESD1 – FASA4 – 2A/E. Welder is identified as 044541. ZPMC Quality Control (QC) Inspector is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2113.

ORTHOTROPIC BOX GIRDER (OBG) AT BAY#11

This QA Inspector observed the following work in progress

Fluxcored Arc Welding (FCAW):

Weld joint # 14 located on Bike Path BK008A6 – 002. Welder is identified as 040736. ZPMC Quality Control (QC) Inspector is identified as Wang Chuang Xin. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – ESAB.

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# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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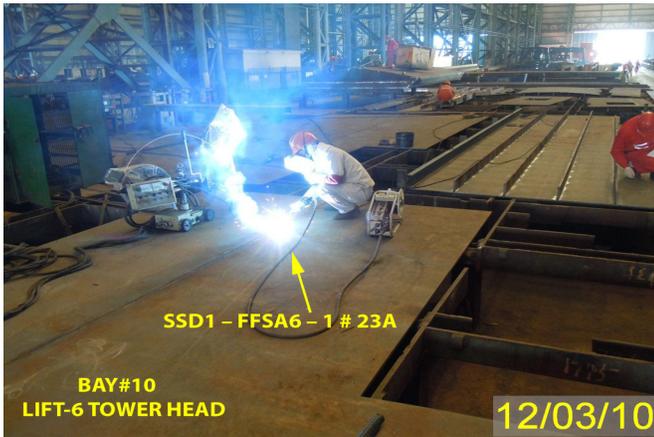
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Weld joint # 41 located on Bike Path BK008A8 – 002. Welder is identified as 054460. ZPMC Quality Control (QC) Inspector is identified as Wang Chuang Xin. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – ESAB.

Shielded Metal Arc Welding (SMAW):

Weld joint # 14 located on Bike Path BK004A2 – 034. Welder is identified as 037840. ZPMC Quality Control (QC) Inspector is identified as Wang Chuang Xin. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2112 – Plug.

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 Thomas Ho- 15002048250, who represents the Office of Structural Materials for your project.

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**Inspected By:** Kumar,Sandeep

Quality Assurance Inspector

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**Reviewed By:** Clifford,William

QA Reviewer