

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-003444**Date Inspected:** 12-Jul-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**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 & OBG**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

OBG Bay 4:

The QA Inspector randomly observed ZPMC welder Li Zhao Qian ID Number 048810, utilizing the Flux Cored Arc Welding (FCAW) Process in the 3G (Vertical Groove) Position with ZPMC Weld Procedure Specification (WPS) WPS-B-T-2233-B-U3-F, to weld the butt splice between 43M Bottom Diaphragm Flange Plate Assembly ESD1-SA268 sections p31 and p1256 at WJ ESD1-SA268-3B. The QA Inspector randomly observed ZPMC CWI Zhao Chen Sun monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 216 amps, 26.4 volts with a travel speed of 116 millimeters (mm) per minute. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC welder Li Mengqian ID Number 054460, utilizing the FCAW Process in the 3G (Vertical Groove) Position with ZPMC WPS WPS-B-T-2233-B-U3-F, to weld the butt splice between 43M Bottom Diaphragm Flange Plate Assembly WSD1-SA268 sections p1254 and p1256 at WJ WSD1-SA268-4A. The QA Inspector randomly observed ZPMC QC monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 213 amps, 26 volts with a travel speed of 115 mm per minute. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

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The QA Inspector randomly observed ZPMC welding personnel fitting up sections of Tower 43M Top Diaphragm Flange Plate Assembly ESD1-SA234 at WJ ESD1-SA234-6A/6B.

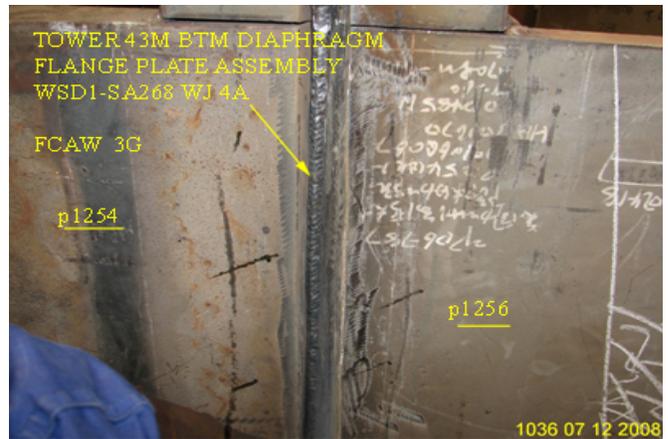
OBG Bay 7:

The QA Inspector randomly observed ZPMC Non Destructive Testing (NDT) Technician Bo Ti Rui, utilizing the Magnetic Particle Testing (MT) Method to examine excavations in WJ's 003 and 009 on Floor Beam Sub-Assembly FB016-011 in accordance with ZPMC Critical Weld Repair Procedure (CWR) B-CWR121. The excavations had been performed to remove transverse cracks at locations Y=6730 and 2670 in WJ 003 and Y=2001 and 2450 in WJ 009. There were a total of 5 transverse cracks removed from the 4 excavations. The referenced ZPMC MT Report is B787-MT-1786. There appeared to be no indications and ZPMC QC released the excavations for weld repair. The following photograph provides additional detail.

The QA Inspector randomly observed ZPMC NDT Technician Bo Ti Rui, utilizing the MT Method to examine excavations in WJ 003 on Floor Beam Sub-Assembly FB001-005 in accordance with ZPMC CWR B-CWR122. The excavations had been performed to remove transverse cracks at locations Y=6110 and 7010 in WJ 003. There were a total of 2 transverse cracks removed from the 2 excavations. The referenced ZPMC MT Report is B787-MT-1802. There appeared to be no indications and ZPMC QC released the excavations for weld repair.

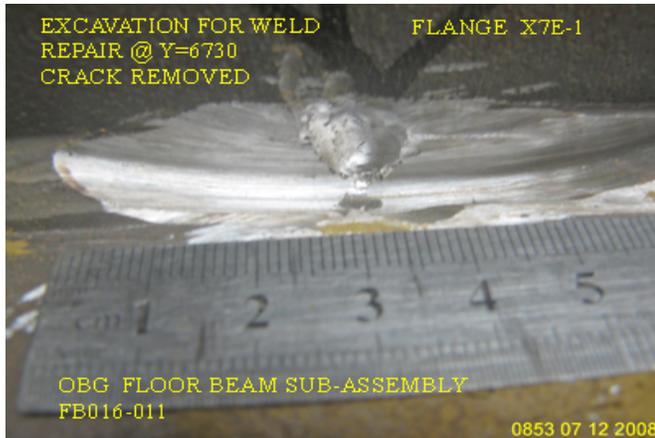
OBG Bay 8:

The QA Inspector randomly observed ZPMC welder Jiang Yong Sheng ID Number 045240, utilizing the FCAW Process in the 2G (Horizontal Groove) Position with ZPMC WPS WPS-B-T-2332-TC-P4-T-1, to weld the Run Off Tab at the butt splice on Tower 43M Top Daphragm Flange Plate Assembly WSD1-SA370 between sections p558 and p1082 at WJ WSD1-SA370-7A/7B. The QA Inspector randomly observed ZPMC CWI Ye Yong Jun monitoring weld parameters. The weld parameters appeared to comply with contract requirements.



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Summary of Conversations:

As noted in the above body of this report.

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 Ady Velasco 13816942685, who represents the Office of Structural Materials for your project.

Inspected By:	Franco,Charlie	Quality Assurance Inspector
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Reviewed By:	Carreon,Albert	QA Reviewer
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