

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-001758**Date Inspected:** 11-Mar-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Huang Wen-Pang, Hu Wei 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:	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).

Bay 4 Tower:

The QA Inspector randomly observed ZPMC Personnel performing heat straightening operations on Tower Diaphragm Sub-Assembly 43M Top p1297(E) per HSR1(T)-0119.

Bay 7 OBG:

The QA Inspector randomly observed ZPMC Welder Yang Xuhe ID Number 057795, utilizing the Shielded Metal Arc Welding (SMAW) Process with ZPMC Weld Procedure Specification (WPS) WPS-B-P-2112-FCM in the 2F (Horizontal Fillet) position to weld pick ups on Floor Beam FB026-02. The QA Inspector randomly observed ZPMC CWI Huang Wen-Pang monitoring weld parameters. Weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed ZPMC Welder Zhang Qingquan ID Number 044774, utilizing the Flux Cored Arc Welding (FCAW) Process with ZPMC WPS WPS-B-t-2232-TC-U4b-F-1 in the 2G (Horizontal Groove) position to weld Flange X7J to Floor Beam FB007-05 at Weld Joint (WJ) FB007-05-043 on the split flange to the web. The QA Inspector randomly observed ZPMC CWI Huang Wen-Pang monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 288 amps,

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

28.6 volts with a travel speed of 492 millimeters per minute. Weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed ZPMC Welder Yuan Wensong ID Number 055491, utilizing the FCAW Process with ZPMC WPS WPS-B-T-2132-3 in the 2F (Horizontal Fillet) position to weld Flange X6A at WJ FB003-03-092 and gusset stiffeners to Floor Beam Diaphragm FB003-03. The QA Inspector randomly observed ZPMC CWI Huang Wen-Pang monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 305 amps, 29.5 volts. Weld parameters appeared to comply with contract requirements.

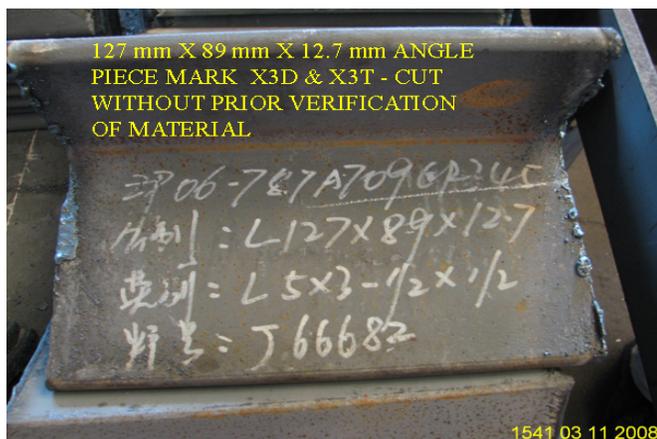
The QA Inspector randomly observed ZPMC Non-Destructive Technician Xue Hai Fong, utilizing the Ultrasonic Testing (UT) Method to examine WJ FB017-02-148, FB026-02-146 and FB017-01-146. There appeared to be no indications and Mr. Xue accepted all three welds.

The QA Inspector randomly observed ZPMC Welder Li Shenhui ID Number 050914, utilizing the FCAW Process with ZPMC WPS WPS-B-T-2132-3 in the 2F (Horizontal Fillet) position to weld Flange X6A at WJ FB003-03-092 and gusset stiffeners to Floor Beam Diaphragm FB003-03. The QA Inspector randomly observed ZPMC CWI Huang Wen-Pang monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 305 amps, 29.5 volts. Weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC Personnel cutting 127 X 89 X 12.7 mm angle for Floor Beam Diagonal Angle Connections piece marks X3D and X3T. The QA Inspector randomly observed that material documentation had not been verified and that there was no traceability for the material being cut. American Bridge/Fluor Enterprises Representative Jeff Evans also observed the material being cut without proper documentation, and informed QA Inspector that he would follow up on the material. The QA Inspector will generate an Incident Report to document this event. The attached photograph provides additional detail.

Bay 8 Tower:

The QA Inspector randomly observed ZPMC Personnel performing heat straightening operations on Tower Diaphragm Sub-Assembly 28M BTM SA309(W) per HSR1(T)-125 and 28M Top SA316(W) per HSR1(T)-136.



WELDING INSPECTION REPORT

(Continued Page 3 of 3)

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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Franco,Charlie	Quality Assurance Inspector
Reviewed By:	Hager,Craig	QA Reviewer
