

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-015801**Date Inspected:** 12-Jul-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:** ZPMC and ABF**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 13 section**Summary of Items Observed:**

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

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Caltrans QA inspector observed two fit up groups performed fit up and SMAW tack weld process on T-joint fillet weld. The T-joint is attached to stiffeners and side plate (SP) with plate 18mm and 25mm wall thick. The side plate and plate ID are # SP3071A/PL3251A, SP3100A/PL3392B and SP3094A/PL3391A of 13AW section. A numerous temporary tack welds have been welded attach between plate and stiffeners after adjusted and secured by hand jack. The fit up SMAW tack welding process were monitored and recorded by ZPMC and ABF QC inspector. Base on Caltrans QAI observation, no discrepancies were noted.

Caltrans QA inspector observed ABF survey group performed survey on the bolt hole lines of 100mm welded bottom plate. The bottom plates ID are PL3366C, PL3365C, PL3364C, PL3363C, PL3362C and PL3361C. All the survey check has been completed today and waits for Caltrans survey group verify. The holes drilling process will be start and finish after the survey accepted by Caltrans. Base on Caltrans QAI observation, no discrepancies were noted.

Caltrans QAI observed two ZPMC heat straightening operators performed heat straightening on the section 14 angle plate mock up with ZPMC Heat Straightening Report. The angle plate mock up ID are SA3348D, SA3349G/H/J, SA3350F and SA3369C. The heating temperature is maximum 650 C (1200 F) and cool in still air. The steel plate flatness offset from 0.2mm to 0.4mm. All the plates for heat straightening have been inspected and

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recorded by ZPMC QC. Based on Caltrans QAI observation, no discrepancies were noted.

Caltrans QA inspector observed a fit up group performed fit up and SMAW tack weld process on stiffeners of base plate. The stiffeners are attached to the base plate of mock up angle plate components section 14. The stiffeners is secured by the tack welds and used for support the base plate prevent distortion when the angle plate welding. The fit up SMAW tack welding process were monitored and recorded by ZPMC and ABF QC inspector. Base on Caltrans QAI observation, no discrepancies were noted.

Caltrans QA Inspector observed a ZPMC welding operator performed SAW CJP process on a longitudinal diaphragm. The longitudinal diaphragm ID and weld number are LD-3036/LD3036-001-004. The FCAW process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Caltrans QA inspector observed four ZPMC welders performed FCAW fillet weld process on OBG side plate (SP). The weld is designed T-joint stiffeners to plate with size 8mm fillet weld. The side plate and plate ID are SP3071B/PL3251A, SP3076A/PL3256A, SP3075A/PL3255A and SP3102A/PL3294A. The region of the weld joint has been pre-heating to specific desired temperature prior FCAW welding. The FCAW process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Caltrans QA Inspector observed a welding operator in process of semi-automatic SAW on CJP weld of mock up U-rib deck panel. The CJP weld is butt joint weld and attached deck panel to deck panel with 20mm wall thick. The semi-automatic SAW process was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

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

Summary of Conversations:

As notes within report above

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 James Devey 15000026784 , who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer
