

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-016311**Date Inspected:** 10-Aug-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**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:** OBG**Summary of Items Observed:**

CWI Inspector: Mr. Liu Hua Jie

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG BAY 9

ZPMC issued "Inspection Notification Sheet" number 06375 informing Caltrans QA that ZPMC will perform ultrasonic inspections (UT) of the complete joint penetration welds on OBG deck plate U rib diaphragm stiffener welds at 1640 hours. This QA Inspector performed random visual and ultrasonic inspections of the following welds: DP3160-001-334, 337, 326, 329; DP3175-001- 262, 265, 270, 273, 278, 281, 286, 289; DP3172-001-152, 155, 160, 163, 198, 200, 206 and 201. Items observed by this QA Inspector appear to comply with AWS D1.5 UT requirements. For additional information on these inspections see the TL6027 Ultrasonic Test Report.

OBG Segment Trial Assembly

At around 21:30 hours this QA Inspector observed ZPMC appeared to be preparing to perform radiography (RT) inspections of the top deck weld between OBG segment 9BW and 9CW. This QA Inspector asked one of the ZPMC radiographers and he indicated that radiography will be performed between OBG segments 9BW~9CW

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and 9AW~9BW from 22:00 hours and 02:00 hours. This QA Inspector informed ZPMC CWI Mr. Liu Hua Jie that this QA Inspector had been informed ZPMC is going to perform radiography (RT) inspections of OBG segments 9BW~9CW and 9AW~9BW from 22:00 hours and 02:00 hours. Mr. Liu Hua Jie informed this QA Inspector that he had not been told that radiography was to be performed.

At around 2130 hours ZPMC CWI Mr. Liu Hua Jie informed this QA Inspector that no ZPMC personnel are performing welding at the OBG trial assembly segments. This QA Inspector observed several workers are performing grinding at various locations inside the West OBG segments and multiple workers are performing drilling of holes inside and outside of cross beam CB11.

At around midnight this QA Inspector observed ZPMC personnel appeared to be performing blast cleaning of the interior of OBG segments 9CE and 9DE. A heavy cloud of dust, dirt and other fine debris was emanating from various openings of the East Bound OBG segments and the dusty cloud was carried in the wind toward portions of the Westbound OBG where ZPMC personnel were drilling holes.

ABF issued "Inspection Notification Sheet" number 08092010-1 item #2 informing QA that on 08-10-2010 at 1900 hours ABF Inspectors would perform ultrasonic (UT) inspections of repaired top deck weld OBW9-008. This weld was located between the top deck plates between OBG segment 9BW and 9CW. ABF/Sense UT Inspectors informed this QA Inspector that ABF Inspectors had completed UT inspections and this weld repair areas were accepted. This QA Inspector performed random visual and ultrasonic inspections utilizing scanning patterns A, B, C and D (AWS D1.5 Fig 6.7) and the areas that were randomly inspected appeared to comply with project specifications. Note: These inspections were documented and tracked on "Verification Witness Request" documents. See the TL-6027 UT report for additional information concerning this inspection.

ABF issued "Inspection Notification Sheet" number 08102010-1 item #1 informing QA that on 08-10-2010 at 1940 hours ABF Inspectors would perform ultrasonic (UT) inspections of repaired hold back weld CA066-005. This weld repair area was located between the edge plate and side plate on OBG segment 9DE in the trial assembly area. ABF/Sense UT Inspectors informed this QA Inspector that ABF Inspectors had completed UT inspections and this weld repair area was accepted. This QA Inspector performed random visual and ultrasonic inspections utilizing scanning patterns A, B, C and D (AWS D1.5 Fig 6.7) and the areas that were randomly inspected appeared to comply with project specifications. Note: These inspections were documented and tracked on "Verification Witness Request" documents. See the TL-6027 UT report for additional information concerning this inspection.

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Summary of Conversations:

See 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 Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
