

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-002890**Date Inspected:** 22-May-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** C.M. Chen**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 Deck Sections**Summary of Items Observed:**

The Quality Assurance (QA) Inspector, Mahlon Lindenmuth, arrived on site at the Zhenhua Port Machinery Company facility on Changxing island, China to periodically monitor welding and Quality Control functions. While on site the Quality Assurance Inspector observed and/or discovered the following:

QA Inspector, Lindenmuth, observed the work being performed in Bay 2 of the New OBG. ZPMC personnel were performing various functions related to the fabrication of the OBG Side Plates and Bottom Plates as well as the deck sections in the jig fixture. The fabrication performed includes but is not limited to the preparation of areas where temporary welds for strongbacks are located, bevel preparation and welding of the Complete Joint Penetration welds (CJP) on Side Plates and Bottom Plates, heat straightening of Side Plates and Bottom Plates.

South Jig Fixture:

*Segment 3BE(SEG16)- QA Lindenmuth observed ZPMC personnel performing second time weld repair on the Complete Joint Penetration (CJP) weld joining the 3BE-E7 segment to the 3BE-D6 segment (side plate to bottom plate). The repairs are being performed from the root side of the joint (bottom side) and are welded in the overhead position (4G). Caltrans QA Inspector, Lindenmuth, observed that ZPMC Quality Control personnel have marked, adjacent to the repair, MT OK indicating that Magnetic Particle Testing (MT) has been performed on the excavated area. Caltrans QA, Lindenmuth, noted some of the welding variables and recorded them below.

*Segment 3AE(SEG14)- QA Lindenmuth observed that no work was performed on the segment by ZPMC personnel during the AM shift.

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*Segment 4AE(SEG18)- QA Lindenmuth observed that no work was performed on the segment by ZPMC personnel during the AM shift.

North Jig Fixture:

*Segment 3BW(SEG15)-QA Lindenmuth observed that the deck section segments 3BE-D6,3BE-C5 and 3BE-E7 are positioned in the the jig fixture. The 3BE-C5 and 3BE-E7 segments have not been welded into the jig but the 3BE-D6 has been welded to the jig fixture.

Shop Welding:

QA Lindenmuth observed ZPMC personnel performing welding on the floor beam segment FL2 diagonal connection plates to bottom flange. The welds are Complete Joint Penetration (CJP) groove welds and are identified as weld joint numbers SSD18-PP022-135 and SSD18-PP022-007. QA Lindenmuth noted some of the welding essential variables and recorded them below.

Note: All work observed today, unless otherwise noted, appeared to comply with the contract documents. All observations noted are based on periodic and random walk throughs of the shop area.

Item	Weld Identification	Applicable WPS	CWI Name	Amperage	Voltage	TravelSpeed	Preheat Temp	Remarks
1	SSD18A-PP022-135	WPS-B-T2233-TC-U	Chen	205	25	117mmpm	35 C	Welder ID: 044801

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

Inspected By: Lindenmuth,Mahlon Quality Assurance Inspector

Reviewed By: Cuellar,Robert QA Reviewer
