

**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-008755**Date Inspected:** 01-Aug-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Wu Zhi 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 Trail Assembly**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

4BE

This QA Inspector performed Magnetic Particle Testing (MT) for the hold back area previously tested by ZPMC MT personnel. This QA Inspector generated a TL-6028 MT report on this date. The weld designation numbers is as follows for OBG Segment 4BE at PP 28 for Side Panel T-Stiffener hold back areas at T- Rib no. 1, 7, 12 and 18 taking reference from Corner assembly. The following weld joints were been inspected.

SP 56-001-001

SP 56-001-013

SP 68-001-009

SP 80-001-009

1AW to 1AAW

This Quality Assurance (QA) Inspector recorded the dimension for the 41 of Deck Panel I -stiffener to I- Stiffener

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## WELDING INSPECTION REPORT

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for alignment as the Segment to Segment is in fit-up condition. Apart from 41 I – Stiffener located Bottom panel and Side panel (Counter weight and cross beam side) for alignment.

3AW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) at Deck Panel Diaphragm to Floor Beam Flange at PP 21 for Segment 3AE. The welder is identified as 204339. Welder was welding in 2G position. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-2G –Repair and weld joint identified as SSD17A-PP021 003(004).

3AE

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) welding to connect Longitudinal Stiffener to the Bottom Panel. It was noticed that during heat straightening of the Longitudinal Stiffener distortion occurred at Bottom Panel and at Longitudinal Stiffener web area between PP 19 and 20 at CB side. The welder is identified as 220066. Welder was welding in 2G position. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-FCAW-2G (2F)-Repair-1 and weld joint identified as Seg 14A-005.

3AE

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) at Bottom Panel to Side Panel connecting weld. It was being that during heat straightening of the Longitudinal Stiffener distortion occurred at Bottom Panel and at Longitudinal Stiffener web area between PP 19 and 20 at CB side. The welder is identified as 066571. Welder was welding in 4G position. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-4G (4F)-Repair and weld joint identified as Seg 14A-005.

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

### Summary of Conversations:

No relevant 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 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Math,Manjunath	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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