

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-007556**Date Inspected:** 01-Jul-2009**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:** Xu Le Feng, Yu Dong Ping**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**Summary of Items Observed:**

The Caltrans (CT) 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).

Outside Yard at Vertical Mill:

The QA Inspector randomly observed the vertical mill was in operation and that milling was being performed simultaneously on Skin Plates A through E at the top of Lift 1 East Tower Shaft at elevation 50.30 M and Skin Plates A through E at the bottom of Lift 2 East Tower Shaft at elevation 50.30 M. The attached photograph provides additional detail.

The QA Inspector randomly observed 5 ZPMC production personnel utilizing angle grinders to blend the bevel faces after torch cutting on the base of Lift 1 East on Skin Plates A through C.

The QA Inspector randomly observed that no contract work was being performed in the interior or on the exterior of or Lift 2 East Tower Shaft.

Heavy Equipment Shop Bay 10:

The QA Inspector performed a 15% Magnetic Particle Testing (MT) Verification of the butt seam welds joining the sections of the Longitudinal Stiffeners A-1 WJ's NSD1-FASA4-1E/E-13A/B, 27A/B, 28A/B; A-2 WJ's

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NSD1-FASA4-1E/E-46A/B, 54A/B, 61A/B and A-3 WJ's NSD1-FASA4-1E/E-79A/B, 87A/B, 94A/B of Lift 4 North Skin A per ZPMC NDT Notification Sheet 003559. The QA Inspector randomly observed that location and the skin plate number were incorrect on ZPMC NDT Notification Sheet 003559. The QA Inspector corrected the location and skin plate number on ZPMC NDT Notification sheet 003559. There appeared to be no indications and the QA Inspector accepted the above listed welds.

The QA Inspector randomly observed ZPMC welder Fan Chun Lei ID 040491, utilizing the Shielded Metal Arc Welding (SMAW) Process in the 3F (Vertical Fillet) Position with ZPMC Weld Procedure Specification (WPS) WPS-345-SMAW-3G (3F) to weld overlay on the external stiffeners after removal of backing on Lift 1 North Tower. The QA Inspector randomly observed ZPMC QC monitoring weld parameters. Weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

Heavy Equipment Shop Bay 11:

The QA Inspector performed a 100% Visual Testing (VT) Inspection 15% MT Verification of the welds on the Diagonal Triangle Plates for Lift 1 West at WJ's WSD1-A115H/J-227, 199; WSD1-A115G/J-231, 200; WSD1-A115F/J-236, 204; WSD1-A115E/J-240; WSD1-A115C/J-115; WSD1-A423G/H-259, 225 and WSD1-A423E/H-239 per ZPMC NDT Notification Sheet 003560. There appeared to be no indications after the re-work and the QA Inspector accepted the above listed welds.

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 Serge Sinevod 13482570045, who represents the Office of Structural Materials for your project.

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Inspected By:	Franco,Charlie	Quality Assurance Inspector
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Reviewed By:	Clifford,William	QA Reviewer
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