

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-003912**Date Inspected:** 09-Sep-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1430**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sun Wei / Wang Sei Fa**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 Panels**Summary of Items Observed:**

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

Bay 3 – New Tower Shop

This QA Inspector randomly observed ZPMC welding and quality control personnel performing inspection, grinding, and Flux Core Arc Welding (FCAW) repairs of Orthotropic Box Girder (OBG) deck panel Partial Joint Penetration (PJP) welds. The deck panels in repair process are designated as: DP564-001 and DP586-002.

In process deck panel repairs appear to be progressing in compliance with Caltrans Engineer Approved Repair Procedure.

Visual Testing Before Repair

This QA Inspector performed an initial visual confirmation of the extent of rejectable indications contained in deck panel designated as DP543-001, DP542-001, DP567-001. This visual confirmation was performed in conjunction with ABF representative Kevin Chen and ZPMC representative Sun Wei.

Bay 1 – OBG Sub Assembly

This QA Inspector observed ZPMC welding personnel performing automated, in gantry, Gas Metal Arc Welding (GMAW) of closed rib Partial Joint Penetration (PJP) welds to deck plate designated as DP545-001 on Gantry #1. In process GMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure.

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This QA Inspector observed continued Gas Metal Arc Welding (GMAW) tack welding and fit-up of closed rib components to deck plates designated as: DP281-001.

Bay 3 – OBG Sub Assembly

Ultrasonic Testing

The QA Inspector also performed Ultrasonic Testing (UT) on approximately 20% of CJP welds previously accepted by ZPMC ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. The QA Inspector observed no rejectable indications at the time of testing. The QA Inspector generated a TL-6027 UT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications. Accepted weld identification numbers were SP571-001-086 and SP519-001-073.

Tracking and Log Book

This QA Inspector reviewed the contract files and tracking logs for the Magnetic Particle Testing (MT), Ultrasonic Testing (UT), Welding Procedure Specifications (WPS), Procedure Qualification Records (PQR), and QC Inspector records for the deck panel repairs to date.

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 Ryan Smith, (858) 232-6799, who represents the Office of Structural Materials for your project.

Inspected By:	Clifford,William	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer
