

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-002137**Date Inspected:** 28-Apr-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 2300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 800**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Wang Nan & Chen Xi**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:**

The Caltrans 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).

New Tower Shop Bay 1:

The QA Inspector observed no welding being performed for this contract.

New Tower Shop Bay 2:

The QA Inspector observed no welding being performed for this contract.

New Tower Shop Bay 3:

The QA Inspector randomly observed ZPMC welder Xiang Jie ID Number 059378, utilizing the Flux Cored Arc Welding (FCAW) Process in the 2F (Horizontal Fillet) Position, with ZPMC WPS WPS-345-FCAW-2G(2F)-Repair-1, to repair underfill in WJ DP064-001-001 attaching Closed Rib U-222 to Deck Plate DP064-001. The QA Inspector randomly observed ZPMC CWI Wang Nan monitoring weld parameters. The weld parameters appeared to comply with contract requirements. The QA Inspector also randomly observed ZPMC welding personnel utilizing grinders to blend and feather welds after weld repair and to remove overlap and reduce oversized welds. The attached photograph provides additional detail on the weld repair to WJ DP064-001-001.

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The QA Inspector randomly observed ZPMC welding personnel utilizing grinders to blend and feather welds after weld repair and to remove overlap and reduce oversized welds on Deck Plate DP064-001 WJ's DP062-001-001 through 010. The QA Inspector randomly observed that a weld repair to WJ DP062-001-006 to correct Incomplete Fusion (IF), Underfill (UF) and Oversize (OS), had been ground to a depth of 1 millimeter (mm) below flush at the top of the weld and the base metal above the weld, after the weld repair. The 1 mm depth of the grinding may have been greater than the original depth of the underfill. The attached photograph provides additional detail.

OBG Bay 1:

The QA Inspector randomly observed ZPMC welder Xiao Bianbin ID Number 059440, utilizing the Gas Metal Arc Welding (GMAW) Process in the 2G (Horizontal Groove) Position, with ZPMC WPS WPS-B-T-2342-U2(U-Rib), to tack weld Closed Ribs to Deck Plate DP329-002 at WJ's DP329-002-001 through DP329-002-008. The QA Inspector randomly observed ZPMC CWI Chen Xi monitoring weld parameters.

The QA Inspector randomly observed ZPMC welder Xiao Bianbin ID Number 059440, utilizing the Gas Metal Arc Welding (GMAW) Process in the 2G (Horizontal Groove) Position, with ZPMC WPS WPS-B-T-2342-U2(U-Rib), to tack weld Closed Ribs to Deck Plate DP408-001 at WJ's DP408-001-001 through DP408-001-010. The QA Inspector randomly observed ZPMC CWI Chen Xi monitoring weld parameters. The attached photograph provides additional detail.



Summary of Conversations:

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

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Inspected By: Franco,Charlie

Quality Assurance Inspector

Reviewed By: Carreon,Albert

QA Reviewer