

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-002311**Date Inspected:** 09-May-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Fu Yu Hong**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:**

CALTRANS Quality Assurance (QA) Inspector, Alfredo Acuna was present for the fabrication scheduled for this project at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

Production Monitoring test (PMT) and Fabrication on Bay # 1

The QA inspector performed random fit-up verifications to the PMT coupons. The QA inspector found that U-ribs fit-up appeared to be in compliance with the contract documents. Welding of PMTs started at approximately 0804 hours. The QA inspector observed welding operators Xiang Huan Feng welder ID # 059416, Xiang Jie, ID # 059378, Gao Xin Dong ID # 059361, Jiang Ting Guang, ID # 062265, Zhang Shao Hui, 059403 and Chen Jie, 059468 performing welding operations on the root pass weld joints # 1 thru 6 respectively with the automatic Gantry Lincoln machine # 1 with the gas metal arc welding (GMAW) on the metal transferring with spray transfer mode following the dual process WPS-B-T-2342-U1 (U-rib)-3 welding procedure specification for closed rib welding of the Production Monitoring Test (PMT) #1 for Production Panel DP-356-001 on closed U-rib Partial Joint Penetration (PJP) welds in Bay #1 and simultaneously a cover pass with the submerged arc welding (SAW) process.

The QA inspector performed final visual inspection to the weld joint # 1 thru 6. The QA inspector found that the welds appeared to be in accordance with the contract documents. The QA inspector marked areas to cut for macroetch samples.

The QA inspector witnessed ZPMC QC inspector Li Li Ming performed 100 % ultrasonic testing on the partial penetration joint weld joints # 1 thru 6 for the production monitoring test welded on this date. The ultrasonic tested areas revealed that welds appeared to be in compliance with the contract documents.

WELDING INSPECTION REPORT

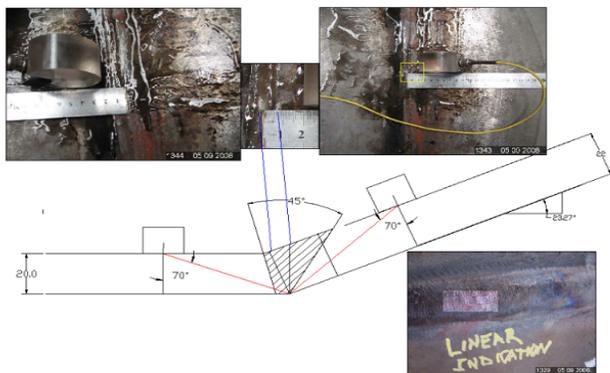
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The QA inspector performed ultrasonic testing (UT) for information purposes at the junction of the completed joint penetration (CJP) weld joint SEG16A-007 at the junction of the bottom plate to side plate BP-12 and SP-30; The QA inspector performed verifications with the 2.25 MHZ and 70° transducer and wedge. The observed a class A rejectable indications in two general areas at the root areas (one of approximately 2000 mm of length and the other 500 mm). The QA inspector performed magnetic particle inspection to back side of the weld and found linear indications at the root areas intermittently in the first 2000 mm from the left end. The QA inspector informed the QA observations (for information purposes) to Caltrans Task Leader Robert Cuellar, ABF representative Warren Buehler and ZPMC QC representative Fu Yu Hong. ZPMC had not completed their examinations.

The photos below show the QA inspector observations:

The QA inspector performed magnetic particle inspection to back side of the weld and found linear indications at the root areas. The QA inspector informed to Caltrans Task Leader Robert Cuellar, ABF representative Warren Buehler and ZPMC QC representative Fu Yu Hong of the QA inspector findings. ZPMC had not completed their examinations.

The photos below show the QA inspector observations.



Summary of Conversations:

As noted above.

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: Acuna, Alfredo

Quality Assurance Inspector

Reviewed By: Cuellar, Robert

QA Reviewer