

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017273**Date Inspected:** 02-Oct-2010**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 Xian 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:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

On this date Caltrans Office of Structural Material (OSM) Quality Assurance (QA) Inspector, D.Sukanthan was present during the time noted above for observations relative to the work being performed.

OBG # BAY 6

This QA inspector performs Ultrasonic Testing (UT) of one (1) weld build up location on cope hole. The member is identified as FB205-040. This QA Inspector generated a Ultrasonic Test report for this date. The member is identified as Cross beam CB13. For further information, please refer incident report number # 869.

This QA Inspector randomly observed the following work in progress:

OBG # BAY 6

During the Caltrans Quality Assurance in-process observations of the fabrication of Crossbeam CB18, this Quality Assurance Inspector (QA) discovered the following issues. Single pass FCAW fillet welds that exceed the maximum single pass weld size qualified as per the WPS. Weld Procedure Specification (WPS) # WPS-B-T-2133 specifies a maximum single pass fillet weld size of 9mm. The single pass fillet weld, as measured by this QA, is 17mm. According to the approved shop drawing the finished fillet weld size is 10mm. The affected weld is identified as CB3002K-004-041. The weld is a fillet weld joining the Intermediate web panel-1 (FB4107-001) stiffener to the Longitudinal Diaphragm-4 Sub Assembly identified as SA3076-002.

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ZPMC welding personnel have performed a weld repair in the vertical position in a downward progression. The length of the repair is approximately 75mm. The affected weld is identified as CB3002K-003-041. The weld is a fillet weld joining the Intermediate web panel-1 (FB4107-001) stiffener to the Longitudinal Diaphragm-3 Sub Assembly identified as SA3076-001.

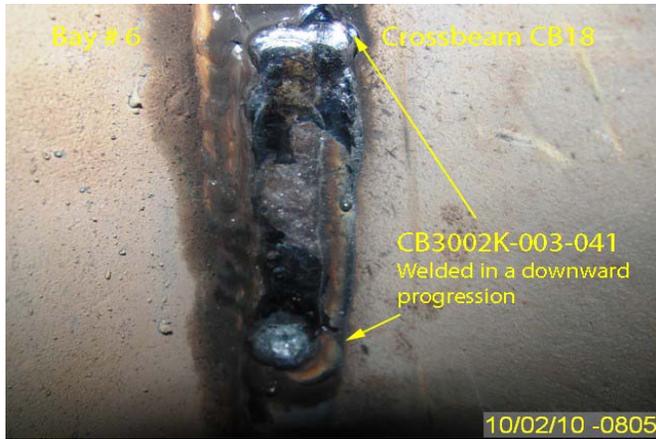
This QA notified ZPMC Certified Welding Inspector (CWI) identified as Mr. Huang Min of this issue and that an incident report would be generated. See attached pictures.

OBG # BAY 7

This QA observed ZPMC qualified welding personnel identified as 217185 perform Flux Cored Arc Welding (FCAW) Process on weld joint X4253F-001-001. ZPMC Quality Control Personnel (QC) identified as Mr. Xu hai yang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2231-TC-U4b-F-2.

This QA observed ZPMC qualified welding personnel identified as 053742 perform Flux Cored Arc Welding (FCAW) Process on weld joint X4253B-001-001. ZPMC Quality Control Personnel (QC) identified as Mr. Xu hai yang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2231-TC-U4b-F-2.

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



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Summary of Conversations:

As mention 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 Eric Tsang 150-00422372, who represents the Office of Structural Materials for your project.

Inspected By: Sukanthan,Dhanasingh

Quality Assurance Inspector

Reviewed By: Hall,Steven

QA Reviewer