

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-014089**Date Inspected:** 17-May-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:** ZPMC and ABF**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:**

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

Bay #13--- OBG 13A section mock up

Caltrans QA Inspector observed eight welders performed FCAW CJP weld process on eight pieces interior stiffeners of floor beams with 45mm wall thick that connected bottom plate of OBG 13A mock up deck section. The floor beams ID are FB3124, FB3125A, FB3104A, FB3122A, FB3127A, FB3126A, FB3123A and FB3110A. The minimum preheat and maximum interpass temperature requirements for FCAW CJP weld are 160C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

Caltrans QA Inspector observed a welder performed FCAW PJP weld process on one of East line lift eye path after back gouged. The lift eye path is attached to side plate and bottom plate. The minimum preheat and maximum interpass temperature requirements for FCAW CJP weld are 180C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

During observation Caltrans QA found two welding issues on the 13A section mock up. 1st the interior diaphragm plate SA3015A is designed attached to two side plates FB3110A & FB3123A with size 10mm fillet weld.

However, the interior diaphragm plate has 65mm exceeds the length more than two side plates. It caused by the both side plate has cutting holes at same location. 2nd all the top key holes plate of interior diaphragm plates SA3014A/B, SA3015A/B, SA3016A/B...etc are designed attached to all the top flanges of the three side plates FB3110A, FB 3120A and FB3123A with size 10mm fillet weld. However, the width of the flange is shorter than the key hole plates or the edge of flange parallel to key hole plates. The termination location of the fillet weld need

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be advice. These issues have been informed to Caltrans SMR James Deyer.

CLOSING STATEMENT

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

Summary of Conversations:

As notes within report 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 James Deyer 15000026784 , who represents the Office of Structural Materials for your project.

Inspected By: Pau,Wai

Quality Assurance Inspector

Reviewed By: Clifford,William

QA Reviewer
