

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-011799**Date Inspected:** 05-Feb-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**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:**

CWI Inspector: Mr. Li Yang

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Trial Assembly

ABF issued "Inspection Notification Sheet" number 02042010-1 informing QA that at 1700 hours ABF Inspectors will be performing magnetic particle (MT) and ultrasonic (UT) inspections of OBG cross beam CB6 west top deck plate to side plate repair weld CB202A-006-013, -014 and -015 at "Y" location 4080mm. At around 2130 hours this QA Inspector performed ultrasonic inspections of the weld repair for detection of longitudinal and planar transverse indications utilizing scanning patterns A, B, C and D (AWS D1.5 Fig 6.7) and no UT rejections were observed. Items observed on this date appeared to generally comply with applicable contract documents.

ABF issued "Inspection Notification Sheet" number 02042010-2 informing QA that at 1730 hours ABF Inspectors will be performing magnetic particle (MT) and ultrasonic (UT) inspections of OBG segment weld OBE6A-001 / F9 between segment 6BE and segment 6CE. At around 2200 hours this QA Inspector observed ABF has identified a UT reject at location: Y=25 mm. This QA Inspector performed ultrasonic inspections of the weld repair location for detection of longitudinal and planar transverse indications utilizing scanning pattern A, B,

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

C and D (AWS D1.5 Fig 6.7) and no additional UT rejections were observed. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Ji Yi, stencil 045268 is preparing to use shielded metal arc procedure WPS-B-P-2214-TC-U4b-FCM-1 to tack weld two temporary plates to the cross beam side of OBG segments 7BW and 7CW. This plate appears to be intended to maintain alignment of the two OBG segments as the various weld joints are brought into alignment. See the photograph below for additional information. This QA Inspector observed the area that was being preheated prior to welding appears to have been partially ground to remove paint and several areas where tack welds are to be made have not had all the paint removed. This QA Inspector informed ZPMC CWI Mr. Li Yang that AWS D1.5 requires all base material that is to be welded needs to be cleaned to a "Bright metal" condition and this surface needs to have all the paint removed. Mr. Li Yang had the front surface of the base material ground and when ZPMC started to preheat the back side of the plate this QA Inspector showed Mr. Li Yan several other areas on the back side of the temporary plate where the paint has not been removed. Mr. Li Yang had this area ground prior to commencement of the tack welding.



Summary of Conversations:

See 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 phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
