

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-011330**Date Inspected:** 23-Dec-2009**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 and Tower**Summary of Items Observed:**

CWI Inspectors: Mr. Liu Hua Jie, Mr. Zhu Zhong Hai

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 BAY 5

This QA Inspector observed ZPMC welder Mr. Wang Yuan, stencil 215250, is using Flux Cored welding procedure WPS-345-FCAW-2G(2F)-Repair-1 to make a weld repair to traveler rail weld 10TR3-019-014 in accordance with weld repair report B-WR9292. This QA Inspector observed a welding current of approximately 260 amps and 31.0 volts. This QA Inspector observed Mr. Wang Yuan appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Jiang Min Quan, stencil 215185 is using Flux Cored welding procedure WPS-345-FCAW-2G(2F)-Repair-1 to make a weld repair to traveler rail weld 10TR3-019-014 in accordance with weld repair report B-WR9292. This QA Inspector observed a welding current of approximately 245 amps and 30.0 volts. This QA Inspector observed Mr. Wang Yuan appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

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OBG Bay 13

ZPMC issued "Inspection Notification Sheet" number 4921 informing QA that ZPMC has completed ultrasonic inspections of OBG segment 11BE welds SEG068-045, SEG068-046 and SEG068-047. This QA Inspector observed ZPMC has marked these welds as being ultrasonically rejected two previous times and that all three welds have repair #2 as been accepted by ZPMC QC UT Inspectors. This QA Inspector performed ultrasonic inspections of approximately 10 percent length of each of these three welds. Items observed by this QA Inspector appear to comply with AWS D1.5 UT requirements. For additional information on these inspections see the TL6027 Ultrasonic Test Report.

OBG BAY 14

This QA Inspector observed ZPMC welder Ms. Gao Min, stencil 050988 is using flux cored welding procedure specification WPS-B-P-2133 to make weld DP384-001-085 between deck plate DP348-001 and a diaphragm plate.

This QA Inspector observed a welding current of approximately 220 amps, 25.0 volts and Ms. Gao Min appears to be certified to make this weld. This QA Inspector observed the base material was preheated with a torch prior to commencement of welding. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Yuan Wensong, stencil 055491 is using flux cored welding procedure specification WPS-B-P-2133 to make weld DP384-001-085 between deck plate DP348-001 and a diaphragm plate. This QA Inspector observed a welding current of approximately 210 amps, 23.5 volts and Mr. Yuan Wensong appears to be certified to make this weld. This QA Inspector observed the base material was preheated with a torch prior to commencement of welding. Items observed on this date appeared to generally comply with applicable contract documents.

Segment 7CE – Outside Yard East of OBG Bay 14

This QA Inspector observed ZPMC welder Mr. Tian Zhaoquan, stencil 045246, and Mr. Li Ji, stencil 045268 are using shielded metal arc welding procedure WPS-345-SMAW-4F-(4F)-FCM-Repair-1 to make 4G (overhead) position shielded metal arc weld repair of OBG segment 7CE bikepath side plate. This QA Inspector observed Mr. Tian Zhaoquan has a welding current of approximately 160 amps and Mr. Li Ji has a welding current of approximately 145 amps. This QA Inspector observed no ZPMC QC / CWI Inspectors near where this welding was taking place and both welders stopped welding approximately five minutes after this QA Inspector arrived. Items observed on this date appeared to generally comply with applicable contract documents.

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.

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