

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-000757**Date Inspected:** 24-Oct-2007**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:** Changxing Island

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|------------------------------------|---------|----|-----|----------------------------------|---------------|----|-----|
| CWI Name: | Sha Zhi | | | 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: | Mock-up 89.00 | | |

Summary of Items Observed:

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to observe the fabrication of Caltrans Mock-up # 89.00, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Caltrans QA Inspector observed ZPMC shop personnel performing Flux Core Arc Welding (FCAW) at Mock-up # 89.00 Skin Plate C and D longitudinal plate Complete Joint Penetration (CJP) welds. Welding was performed by ZPMC certified welder Mr. Lei Lichao. ZPMC Quality Control (QC) inspector Mr. Sha Zhi monitored welding parameters of the above mentioned welds. Mr. Fu Yuhong stated welding of the longitudinal plate CJP welding was performed in accordance to WPS-B-T-2231-B-U3-F. Caltrans QA Inspector Viars recorded the following welding parameters of # 89.00 Mock-up, skin plate D longitudinal plate CJP weld # 15 filler pass. Amperage 330, voltage 31.3 and a travel speed of 360 mm/min with a heat input of 1.72 kJ/mm.

Caltrans QA observed ZPMC personnel performing heat straightening of Mock-up 89.00 Skin B MA24. The following picture below illustrates heat straightening in progress.

Mock-up # 89.00 skin plate C weld # 25 was in process of having the bevel face resurfaced by ZPMC personnel.

The Caltrans QA Inspector monitored welding operations of # 89.00 Skin C and D. Caltrans QA Inspector observed that the welding operations appeared to be in general conformance with AWS D1.5 2002 requirements.

WELDING INSPECTION REPORT

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Summary of Conversations:

As identified within the contents of this report.

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.

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| Inspected By: | Viars,Larry | Quality Assurance Inspector |
| Reviewed By: | Cuellar,Robert | QA Reviewer |
