

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-000587**Date Inspected:** 03-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**CWI Name:** Lujian 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:** 114 A116 & 77 D, E**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to observe the Ultrasonic Testing (UT) of the Caltrans Mock-up # 114.00 and Magnetic Particle testing (MT) of Mock-up # 114.00, 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 Quality Control Inspector (QC) performing UT on Mock-up # 114.00 assembly A116 Complete Joint Penetration welds # 1 and # 2, and MT of Mock-up # 77.00 Skin Plate D sub assembly MA5 longitudinal stiffener welds. The digital picture below illustrates ZPMC QC Ms. E Shiqin performing UT on Mock-up # 114.00 assembly A116.

Caltrans QA Inspector observed ZPMC QC nondestructive technician, Ms. E Shuiqin performing Ultrasonic Testing on Mock-up # 114.00 interior corner splice assembly A116. Mr. E Shuiqin performed straight beam, 60 and 70 degree shear wave testing from concave surface of the weld joints # 1 and # 2. Testing of the welds was completed from the concave surface. ZPMC QA Fu Yuhong stated the UT testing will be completed on the following shift. Unacceptable indications from the concave side are as follows. Weld # 1, 50 mm and weld # 2, 195 mm. Indications have been marked on the weld surface with length and depth as well as indication rating.

Magnetic Particle testing was performed by ZPMC QC Mr Cai Xin Xin on Mock-up # 77.00 Skin D sub assembly MA5 longitudinal stiffener welds cover passes. Welds were blended with light grinding prior to testing to remove surface irregularities that produced Magnetic Particle indications. Mr. Cai Xin Xin performed MT on # 77.00 Skin E longitudinal stiffener weld MUSA MA # 4 excavation area. Mr. Cai Xin Xin found the above mentioned

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

stiffener welds and excavation area to be acceptable to AWS D1.5 2002 requirements.

The Caltrans QA Inspector performed Magnetic Particle examinations of # 77.00 Skin D, E and monitored UT testing of Mock-up # 114.00 assembly A 116. Caltrans QA Inspector observed that the testing appeared to be in general conformance with AWS D1.5 2002 requirements. See MT report TL6028 generated on this date for further information.



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.

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