

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-000249**Date Inspected:** 26-Jun-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Wei Huang**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:** HP2007153 & 147**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Bruce Berger was present to observe quality control functions related to welding, testing and fabrication procedures at the Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

Caltrans Quality Assurance (QA) Inspector Bruce J. Berger witnessing ZPMC performing submerged arc welding (SAW) procedure qualification record for (PQR) HP2007153, PWPS-B-T-3221 test. The welder is identified as Mr. Jiang Xiao Hu, re-welding pass eighty five. The test plate material type is identified as A709 Grade HPS485W and thickness, 90 mm. The PQR complete joint penetration weld joint testing was performed in the flat (1G) position. The welding consumable is identified as 4.8 mm electrodes, classification EM12K filler metal brand JW-3, specification AWS A5.17 with flux JF-B. Caltrans QA observed ZPMC QA Inspector, Mr. Xia Hu along with two associates monitoring and supervising the testing per AWS 5.13 criteria; amperages, voltages, travel speeds, preheat and inter-pass temperatures. Also present at the test site was American Bridge/Fluor (ABF) quality control (QC) inspector, Mr. Kevin Dye. QA observed that the wind velocity at the ZPMC testing site appear to be in conformance with AWS D1.5, paragraph 4.14.3 requirements. The welding of this PQR was completed this morning.

Caltrans Quality Assurance (QA) Inspector Bruce J. Berger witnessing ZPMC performing submerged arc welding (SAW) procedure qualification record for (PQR) HP2007147, PWPS-B-T-3221 test. The welder is identified as Mr. Jiang Xiao Hu, welding pass one through eight. The test plate material type is identified as A709 Grade HPS485W and thickness, 90 mm. The PQR complete joint penetration weld joint testing was performed in the flat (1G) position. The welding consumable is identified as 4.8 mm electrodes, classification ENi5 filler metal brand

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LA-85, specification AWS A5.23 with flux MIL800-HPNi. Caltrans QA observed ZPMC QC Inspector, Mr. Xu Bing along with two associates monitoring and supervising the testing per AWS 5.13 criteria; amperages, voltages, travel speeds, preheat and inter-pass temperatures. Also present at the test site was American Bridge/Fluor (ABF) quality control (QC) inspector, Mr. Kevin Dye and Dustin Brungardt. QA observed that the wind velocity at the ZPMC testing site appear to be in conformance with AWS D1.5, paragraph 4.14.3 requirements. The welding of this PQR was removed from further welding due to the copper wire guide tube being fused to the plate bevel. A new plate is to be started tomorrow morning.



Summary of Conversations:

No relevant conversations took place on this date.

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: Berger, Bruce

Quality Assurance Inspector

Reviewed By: McClary, David

QA Reviewer
