

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 #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022771**Date Inspected:** 20-Apr-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Jobsite**CWI Name:** Gary Ehram**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:** SAS OBG**Summary of Items Observed:**

Quality Assurance inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

1. 7W 8W Longitudinal Stiffener #4
2. 8W PP61.5 Longitudinal Stiffener #6
3. 9W 10W D2
4. 7W PP56 W3 Lifting Lug Holes 1-4
5. 7W 8W Longitudinal Stiffeners 1-3 Ultrasonic Testing
6. 10W 11W A5 Ultrasonic testing
7. 7E PP55-E4 Lifting Lug Holes #1-4 Ultrasonic testing
8. 9E 10E C1, C2, D1, E1, E2. Ultrasonic Testing

1. 7W 8W Longitudinal Stiffener #4

The QA Inspector observed the QC Inspector identified as Gary Ehram Visually Inspecting the Longitudinal Stiffener (LS) #5 north face. The QA Inspector observed the ABF welder Jin Pei Wang preparing the north face of LS #4. The QA Inspector noted the dimensions of the excavation as 20mm's deep, 100mm's long and 20mm's wide. The QA Inspector observed the welder preheat the surface and the QA Inspector verified the temperature with a temperature indicating stick. The QA Inspector randomly observed the welding in progress. The QA Inspector noted that the repair weld had been completed.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

2. 8W PP61.5 Longitudinal Stiffener#6

The QA Inspector observed the ABF welder Xiao Jian Wan grinding and blending the joint fit-up on LS #6. The QA Inspector observed the QC Inspector mark the joint at 14mm's near the bottom, 11mm's in the middle and 14mm's near the top of the joint for the welder to repair. The QA Inspector periodically observed the welders progression. The QA Inspector noted that the work was in progress at the end of the QA's shift.

3. 9W 10W D2

The QA Inspector observed the ABF welder Rory Hogan perform Plasma Arc Cutting (PAC) on 9W 10W D2. The QA Inspector periodically observed the welder performing consecutive passes with the PAC. The QA Inspector noted that the work was in progress at the end of the QA Inspectors shift.

4. 7W PP56 W3 Lifting Lug Holes 1-4

The QA Inspector observed ABF welder Darcel Jackson grinding and blending the completed welds on Lifting Lug Holes (LLH) 1 – 4. The QA Inspector observed the welder transfer equipment inside the OBG and prepare to Carbon Air Arc (CAA) from the underside of the LLH's. The QA Inspector randomly observed the welder and noted that the work was not complete by the end of the QA Inspectors shift.

5. 7W 8W A Longitudinal Stiffeners 1-3 Ultrasonic Testing

The QA Inspector performed Ultrasonic Testing on the LS's 1-3 located at 7W 8W A. The QA Inspector utilized a G.E./Krautkramer USN 60. The QA Inspector also utilized the UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 during the examination. Upon completion of the testing, it was noted by the QA Inspector that no indications were present and the work was found to be acceptable.

6. 10W 11W A5

The QA Inspector performed Ultrasonic Testing on Deck Plate A at 10W 11W A5 at y=4000 to 4500. The QA Inspector utilized a G.E./Krautkramer USN 60. The QA Inspector also utilized the UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 during the examination. Upon completion of the testing, it was noted by the QA Inspector that no indications were present and the work was found to be acceptable.

7. 7E PP55-E4 Lifting Lug Holes #1-4 Ultrasonic testing

The QA Inspector performed Ultrasonic Testing on LLH's #1-4 at 7E PP55-E4. The QA Inspector utilized a G.E./Krautkramer USN 60. On Hole #1 from y=0 to 340mm's. On Hole #2 from y=340mm's to 680mm's. On Hole #3 from y=340 to 680mm's. On Hole #4 from y=0 to 340mm's. During the inspection, the QA Inspector utilized the UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 during the examination. Upon completion of the testing, it was noted by the QA Inspector that no indications were present and the work was found to be acceptable.

8. 9E 10E C1, C2, D1, E1, E2. Ultrasonic Testing

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

The QA Inspector performed Ultrasonic Testing on 9E 10E C1 at y=2500 to 3000. C2 y=1500-2000. D1 y=250-750. E1 y=500-1000. E2 y=2000-2500. The QA Inspector utilized a G.E./Krautkramer USN 60. The QA Inspector also utilized the UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 during the examination. Upon completion of the testing, it was noted by the QA Inspector that no indications were present and the work was found to be acceptable.

Summary of Conversations:

As noted 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 Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By: Frey,Doug

Quality Assurance Inspector

Reviewed By: Levell,Bill

QA Reviewer