

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 #: 13.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-006629**Date Inspected:** 05-May-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 330**Contractor:** Oregon Iron Works Clackamas, Or.**Location:** Clackamas, Oregon**CWI Name:** Steve Barnett, Jon Nickolich**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:** Hinge K Pipe Beams**Summary of Items Observed:**

On this date, Caltrans Quality Assurance Inspector (QA) Sherri Brannon is present at the Oregon Iron Works, Inc. (OIW) jobsite in Clackamas, Oregon for the purpose of observing fabrication of the Hinge K Pipe Beams.

OIW Fabrication Shop-Bay 3 (sub-assembly):

QA Inspector Brannon randomly observed OIW qualified welder Mr. Bounheune Savanh ID#S74 joining hinge K pipe beam fuse half section MK#a124-4 (HPS 485W) to hinge K pipe beam fuse half section MK#a124-13 (HPS 485W) assembly MK#120A-4. The complete joint penetration (CJP) weld is identified as weld joint #WM3-18. Mr. Savanh was observed welding in the 1G (flat) position utilizing submerged arc welding (SAW) process with a 2.4mm diameter electrode, filler metal brand Lincoln Electric LA85 class F9A4-Eni5-G-H2. QA Inspector Brannon observed the OIW QC CWI Inspector's Mr. Steve Barnett and Mr. Jon Nickolich verifying that the pre-heat and welding parameters were in accordance with the Welding Procedure Specification (WPS). Welding parameters observed by QA Inspector Brannon appear to be in general compliance with the approved WPS 4020 revision number 0.

OIW Fabrication Shop-Bay 3 (sub-assembly):

QA Inspector Brannon was informed by QC Inspector Mr. Steve Barnett of linear indications in the root pass weld that had cracked joining stiffener ring plate MK#b125 (HPS 485 W) to hinge K pipe beam fuse half section MK#a124-2 (HPS 485W). The partial joint penetration (PJP) weld is identified as weld joint #WM3-02. QA Inspector Brannon observed welder Mr. Yuriy Bannikov ID#B61 remove the weld metal from the 3 area's by method of grinding. After removal of the weld metal QC Inspector Mr. Barnett and QA Inspector Brannon performed visual inspection (VT) and magnetic particle testing (MT) on the excavation areas and found no

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

relevant indication in the base metal.

OIW Fabrication Shop-Bay 3 (sub-assembly):

QA Inspector Brannon randomly observed OIW qualified welder Mr. Liem Bui ID#B10 and one helper welding joining hinge K pipe beam gusset plate MK#a107 (HPS 485 W) to base plate MK#a110-2(HPS 485 W) for hinge k pipe beam section 102A-2. The fillet weld is identified as weld joint #W2-04. Mr. Bui was observed welding in the 2F (horizontal) position utilizing submerged arc welding (SAW) process with a 2.4mm diameter electrode, filler metal brand Lincoln Electric LA85 class F9A4-Eni5-G-H2. QA Inspector Brannon observed the OIW QC CWI Inspector Mr. Steve Barnett verifying that the pre-heat and welding parameters were in accordance with the Welding Procedure Specification (WPS). Welding parameters observed by QA Inspector Brannon appear to be in general compliance with the approved WPS 4020 revision number 0.

OIW Fabrication Shop-Bay 3 (sub-assembly):

QA Inspector Brannon randomly observed OIW qualified welder Mr. Jayson Sinsel Heaton D#S58 and one helper welding joining hinge K pipe beam gusset plate MK#a107 (HPS 485 W) to base plate MK#a110-2(HPS 485 W) for hinge k pipe beam section 102A-2. The fillet weld is identified as weld joint #W2-05. Mr. Heaton was observed welding in the 2F (horizontal) position utilizing submerged arc welding (SAW) process with a 2.4mm diameter electrode, filler metal brand Lincoln Electric LA85 class F9A4-Eni5-G-H2. QA Inspector Brannon observed the OIW QC CWI Inspector Mr. Jon Nickolich verifying that the pre-heat and welding parameters were in accordance with the Welding Procedure Specification (WPS). Welding parameters observed by QA Inspector Brannon appear to be in general compliance with the approved WPS 4020 revision number 0.

Material, Equipment, and Labor Tracking:

QA Inspector Brannon performed a verification of personnel at OIW. QA Inspector Brannon observed 1 Supervisor, 1 Quality Control and 2 production personnel on this date.

The following digital photograph below illustrates observation of the activities being performed.



Summary of Conversations:

As stated within this report.

Comments

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

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 Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Brannon, Sherri	Quality Assurance Inspector
Reviewed By:	Adame, Joe	QA Reviewer
