

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 #: 1x.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-027455**Date Inspected:** 16-Apr-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** On Site**CWI Name:** Steve Jensen**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 Components**Summary of Items Observed:**

This Quality Assurance (QA) Inspector, Art Peterson arrived on site between the times noted above. This QA Inspector was on site to randomly observe Quality Control (QC) personnel perform Non-Destructive Testing (NDT) and monitor the welding operations performed by American Bridge Fluor (ABF) welding personnel. The following observations were:

Segment 12W between PP109 and PP109.5 W5 Line - Deck Access Hole:

This QA Inspector observed ABF welder Kit Lounchane (Welder ID 4985) performing the complete-joint penetration (CJP) groove weld operation per the Shielded Metal Arc Welding (SMAW) process in the (4G) overhead position after the groove was back-gouged to sound metal connecting the Deck Access Hole (DAH) insert plate to the Deck "A" plate between panel point PP109 and PP109.5 along Grid line W5.

This QA Inspector observed QC Inspector Sal Marino verify prior to the start of the CJP groove weld operation, that the minimum preheat temperature as per the approved WPS was established; and afterwards verified that the welding parameters (Amps and Travel Speed) were in accordance with WPS 1110A Revision 1 using E7018 (1/8") diameter electrode.

This QA Inspector observed that the CJP groove weld operation of the DAH insert plate at the aforementioned location was in-process at the end of this QA Inspectors' shift.

Segment 10W to Segment 11W W6 Line - Drip Rail:

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This QA Inspector observed ABF welder Eric Sparks (Welder ID 3040) performing the complete-joint penetration (CJP) groove and fillet weld operation per the Shielded Metal Arc Welding (SMAW) process in the (2G) and (2F) horizontal positions on a section of the drip rail that was previously removed from the Edge plate. The location where the drip rail was removed was between Segment 10W and Segment 11W on the W6 line.

This QA Inspector observed QC Inspector John Pagliero verify prior to the start of the CJP groove and fillet weld operation, that the minimum preheat temperature as per the approved WPS was established; and afterwards verified that the welding parameters (Amps and Travel Speed) were in accordance with WPS F1200A for the fillet weld operation and WPS 1010 Revision 1 for the CJP groove weld operation using E7018 (1/8") diameter electrode.

This QA Inspector observed that the CJP groove and fillet weld operation of the drip rail plate to the Edge plate at the aforementioned location was completed at the end of this QA Inspectors' shift.

Segment 12W between PP109 and PP109.5 W2 Line - Deck Access Hole:

This QA Inspector observed ABF welder Steve Davis performing the Air-Carbon-Arc back-gouge operation to excavate and remove the backing bar from the 2nd side of a complete-joint penetration (CJP) groove weld of the Deck Access Hole (DAH) insert plate from the bottom side of Deck "A" plate between panel point PP109 and PP109.5 along Grid line W2.

Afterwards, this QA Inspector observed QC Inspector Sal Marino perform the magnetic-particle test (MT) inspection by the yoke method of the back-gouged excavated area of the DAH insert plate groove weld from the bottom side and the QC Inspector detected linear indications at several locations. These areas were marked on the groove weld for further excavation by ABF welder Steve Davis.

This QA Inspector observed that the Air-Carbon-Arc gouge operation of the DAH insert plate at the aforementioned location was in-process at the end of this QA Inspectors' shift.

Segment 12E between PP109 and PP109.5 E5 Line - Deck Access Hole:

This QA Inspector observed ABF welder Rick Clayborn (Welder ID 2773) performing the non-critical repair weld operation of a complete-joint penetration groove weld per the Shielded Metal Arc Welding (SMAW) process in the (4G) overhead position after the repair areas (9) locations were gouged to sound metal to remove the ultrasonic rejectable indications on the Deck Access Hole (DAH) insert plate welded to the Deck "A" plate between panel point PP109 and PP109.5 along Grid Line E5.

This QA Inspector observed QC Inspector Sal Marino verify prior to the start of the CJP groove weld operation, that the minimum preheat temperature as per the approved WPS was established; and afterwards verified that the welding parameters (Amps and Travel Speed) were in accordance with WPS 1000 Repair Revision 2 using E7018 (1/8") diameter electrode.

This QA Inspector observed that the non-critical repair weld operation of the DAH insert plate at the

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above-mentioned location was completed at the end of this QA Inspectors' shift.

FW Spencer - On site:

This QA Inspector observed ABF welder Damien LLanos (Welder ID 6645) performing the complete-joint penetration (CJP) butt-joint groove weld operation per the Shielded Metal Arc Welding (SMAW) process in the (1G) rotated flat position on four (4") diameter pipe for the water supply line at weld splice locations identified as 33/4/101/NE, 34/4/103/NE and 35/4/105/NE.

This QA Inspector observed QC Inspector Steve Jensen verify prior to the start of the CJP butt-joint groove weld operation, that the minimum preheat temperature as per the approved WPS was established; and afterwards verified that the welding parameters (Amps and Travel Speed) were in accordance with WPS 1-12-1 Revision 0 using E6010 root pass 3/32" diameter electrode and E7018 fill and cover pass 3/32" diameter electrode.

This QA Inspector observed that the CJP butt-joint groove weld operation on the (3) four (4") diameter pipe welds were completed at the end of this QA Inspectors' shift.



Summary of Conversations:

Only general conversations between this QA Inspector and the QC Inspectors 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 Nina Choy, 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By: Peterson, Art

Quality Assurance Inspector

Reviewed By: Levell, Bill

QA Reviewer