

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-028514**Date Inspected:** 02-Oct-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:** Job Site

CWI Name:	As noted below		
Inspected CWI report:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A

CWI Present:	Yes	No	
Rod Oven in Use:	Yes	No	N/A
Weld Procedures Followed:	Yes	No	N/A
Verified Joint Fit-up:	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:

12E PP115.5- FP1/PS1 (Interior)

This QA Inspector randomly observed the excavation operations of Ultrasonic rejectable indications on the Complete Joint Penetration (CJP) joint on the flange plate and the plate stiffener at 12E PP115.5-FP1/PS1 on the interior of the OBG. This QA Inspector observed ABF/JV qualified welder Xiao Hua Luo #1291 performing the Carbon Arc Gouging (CAG) method to remove metal from the material. The welder was observed cleaning up the excavations utilizing a small disc grinder and a de-burring drill. Upon completion of the excavation, Quality Control (QC) Inspector William Sherwood performed a Magnetic Particle Inspection (MT) of the site to determine soundness of the metal and observed no indications, QC then measured the dimensions of the excavations for length, width and depth. This QA Inspector recorded the dimensions of the excavations as:

Y=0mm; 110mm in length, 30mm wide and 8mm deep, PS1 – y=0mm; 65mm in length, 35mm wide and 8mm deep.

Prior to welding, QC Inspector William Sherwood was observed monitoring and measuring the pre-heat temperatures and parameters as they pertain to ABF-WPS-D1.5-1000-Repair-Revision 2. This QA Inspector made random observations of SMAW in the 2G horizontal position and noted no issues with the work at this location

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and at the time of this repair, no RWR was required for this first time weld repair. This QA Inspector made subsequent observations throughout the shift to monitor quality and it was noted that the E7018-H4R electrodes were stored properly in a sealed container after being opened and they were drawing amperage of 134. The welder was observed continuing the in process repair welding and this QA Inspector noted that no issues were present at this location. QC Inspector William Sherwood was also present to monitor the welding and the parameters in the later stages of the shift. This QA Inspector noted that the work at this location was completed on this date and appeared to be in general conformance with the contract specifications.

12E PP116.5-BW1 (Interior)

This QA Inspector randomly observed the excavation operations of Ultrasonic rejectable indications on the Complete Joint Penetration (CJP) joint on the vertical beam webs at 12E PP116.5-BW1 on the interior of the OBG. This QA Inspector observed ABF/JV qualified welder Jose Torres #6235 performing the Carbon Arc Gouging (CAG) method to remove metal from the material. The welder was observed cleaning up the excavations utilizing a small disc grinder and a de-burring drill. Upon completion of the excavation, Quality Control (QC) Inspector William Sherwood performed a Magnetic Particle Inspection (MT) of the site to determine soundness of the metal and observed no indications, QC then measured the dimensions of the excavations for length, width and depth. This QA Inspector recorded the dimensions of the excavations as:

Y=35mm; 70mm in length, 20mm wide and 9mm deep, y=155mm; 70mm in length, 28mm wide and 8mm deep, y=352mm; 80mm in length, 29mm wide and 10mm deep, FP1- y=70mm; 70mm in length, 25mm wide and 9mm deep, y=0mm; 90mm in length, 25mm wide and 10mm deep. Face B of BW1 y=480mm; 90mm in length, 22mm wide and 9mm deep, Face B of BW2 y=0mm; 60mm in length, 35mm wide and 8mm deep.

Prior to welding, QC Inspector William Sherwood was observed monitoring and measuring the pre-heat temperatures and parameters as they pertain to ABF-WPS-D1.5-1000-Repair-Revision 2. This QA Inspector made random observations of SMAW in the 3G vertical position and noted no issues with the work at this location and at the time of this repair, no RWR was required for this first time weld repair. This QA Inspector made subsequent observations throughout the shift to monitor quality and it was noted that the E7018-H4R electrodes were stored properly in a sealed container after being opened and they were drawing amperage of 136. The welder was observed continuing the in process repair welding and this QA Inspector noted that no issues were present at this location. QC Inspector William Sherwood was also present to monitor the welding and the parameters in the later stages of the shift. This QA Inspector noted that the work at this location was completed on this date and appeared to be in general conformance with the contract specifications.

12E PP113.5-BW2/PS3 (Interior)

This QA Inspector randomly observed the excavation operations of Ultrasonic rejectable indications on the Complete Joint Penetration (CJP) joint on the flange plate and the plate stiffener at 12E PP113.5-BW2/PS3 on the interior of the OBG. This QA Inspector observed ABF/JV qualified welder Alex Blanco #9650 performing the Carbon Arc Gouging (CAG) method to remove metal from the material. The welder was observed cleaning up the excavations utilizing a small disc grinder and a de-burring drill. Upon completion of the excavation, Quality Control (QC) Inspector William Sherwood performed a Magnetic Particle Inspection (MT) of the site to determine soundness of the metal and observed no indications, QC then measured the dimensions of the excavations for

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length, width and depth. This QA Inspector recorded the dimensions of the excavations as:

Y=100mm; 80mm in length, 20mm wide and 9mm deep, PS3 – y=10mm; 70mm in length, 27mm wide and 13mm deep.

Prior to welding, QC Inspector William Sherwood was observed monitoring and measuring the pre-heat temperatures and parameters as they pertain to ABF-WPS-D1.5-1000-Repair-Revision 2. This QA Inspector made random observations of SMAW in the 3G vertical and 2G horizontal positions and noted no issues with the work at this location and at the time of this repair, no RWR was required for this first time weld repair. This QA Inspector made subsequent observations throughout the shift to monitor quality and it was noted that the E7018-H4R electrodes were stored properly in a sealed container after being opened and they were drawing amperage of 135. The welder was observed continuing the in process repair welding and this QA Inspector noted that no issues were present at this location. QC Inspector William Sherwood was also present to monitor the welding and the parameters in the later stages of the shift. This QA Inspector noted that the work at this location was completed on this date and appeared to be in general conformance with the contract specifications.

Summary of Conversations:

Conversations relevant to work performed.

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 Gary Thomas 916-764-6027 , who represents the Office of Structural Materials for your project.

Inspected By:	Frey,Doug	Quality Assurance Inspector
Reviewed By:	Reyes,Danny	QA Reviewer
