

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-016711**Date Inspected:** 09-Sep-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1100**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name: John Pagliero
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:** OBG Section**Summary of Items Observed:**

: This Quality Assurance (QA) Inspector, Craig Hager was on site at the job 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 to monitor American Bridge/Fluor (ABF) welding operations.

The following observations were made:

- 1) At weld joints E6/E7 – D1 and D2, inside the OBG section: ABF welding personnel James Zhen (#6001) was setting up equipment for the Submerged Arc Welding (SAW). QC Inspector John Pagliero was present.
- 2) At weld joints E5/E6 - LS-4, 5 and 6: ABF welding personnel Xiao Jian Wan (#9677) was setting up welding equipment and ventilation equipment in preparation to resume welding at this location. QC Inspector John Pagliero was present.
- 3) At weld joints E4/E5 - LS-1, 2 and 3: ABF welding personnel Hua Qiang Hwang (#2930) was performing Shielded Metal Arc Welding (SMAW) to build up (butter) LS-3 weld joints. QC inspections. QC Inspector John Pagliero was present.
- 4) At E1, North Side, the first access hole cut for ventilation, ABF welding personnel Fred Kaddu (#2188) was performing grinding on the deck plate in preparation of fitting of the weld joint.

At weld joints E6/E7 – D1 and D2, inside the OBG section this QA Inspector observed ABF welding personnel

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James Zhen (#6001) and various helpers setting up the equipment to begin using the Submerged Arc Welding (SAW) process on a track system. This QA Inspector also observed various ABF personnel bolting the continuity plates between the wide flanges at the ends of the weld joint. QC Inspector John Pagliero was present but welding was not being performed. This QA Inspector observed the tack welding from the previous day had been completed and performed a random visual inspection. The welding observed appeared to comply with the contract requirements.

At weld joints E5/E6 - LS-4, 5 and 6 this QA Inspector observed ABF welding personnel Xiao Jian Wan (#9677) was setting up welding equipment and ventilation equipment in preparation to resume welding at this location. QC Inspector John Pagliero was present but welding was not being performed.

At weld joints E4/E5 - LS-1, 2 and 3 this QA Inspector observed ABF welding personnel Hua Qiang Hwang (#2930) was performing Shielded Metal Arc Welding (SMAW) to build up (butter) LS-3 weld joints. This QA Inspector randomly observed QC Inspector John Pagliero verify the following SMAW parameters: 125 amperes using a 3.2 mm diameter 9018H4R electrode. The welding observed appeared to comply with ABF-WPS-D15-1210-3.

This QA Inspector observed ABF welding personnel Fred Kaddu (#2188) at OBG section E1, North Side, the first access hole. He was performing grinding on the deck plate and informed this QA Inspector it was in preparation of fitting up the access plate for welding. This QA Inspector observed the access plate which had been flame cut out to provide access for ventilation was setting on the deck adjacent to the hole in the deck and was marked as "L 1E-N". The access plate had the following weld joint preparation: an approximately 33 degree single bevel with a 6-7 mm land face, the overall thickness was 20 mm. The transverse and longitudinal stiffeners on the access plate appeared to have a double 45 degree bevel with a 2-3 mm land face. All weld joints appeared to have been ground and cleaned after flame cutting. The deck plate, which had also been flame cut, had a single 33 degree bevel bout only on the southern most side (straight section). This QA Inspector had a conversation with welding supervisor Danny Ieraci (#3232) regarding the proposed welding and was informed of the following. The radius (both ends of the access plate) areas will be a single bevel joint design, the straight areas will be a double bevel joint design and the welding will as follows: a SMAW weld pass will be performed in the overhead position form inside the OBG section (backing material was not disclosed at this time), this SMAW weld will then be back gouged to sound metal, the radius areas will then be filled using the SMAW process from the top side and the straight sections filled using the SAW process form the top side. Welding supervisor Danny Ieraci (#3232) also informed this QA Inspector the Welding Procedure Specification had not been approved as of this date and that welding would not be performed until it was approved.

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

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Inspected By: Hager,Craig

Quality Assurance Inspector

Reviewed By: Levell,Bill

QA Reviewer