

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 #: 82.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-019842**Date Inspected:** 15-Jan-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1330**Contractor:** Westmont Industries**Location:** Santa Fe Springs, CA.**CWI Name:** Ruben Dominguez**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:** Travelers**Summary of Items Observed:**

The Quality Assurance Inspector Sean Vance arrived on site at Westmont Industries (WMI) in Santa Fe Springs, CA, to randomly observe the in process welding, QC inspection and non-destructive testing of the Travelers.

Upon the arrival of the QA Inspector, the following observations were made:

Traveler Test Rack

On this date, the QA Inspector randomly observed WMI production personnel performing fitting, welding and cutting activities on various assemblies for the Traveler Test Rack.

SAS-EB Traveler

On this date, the QA Inspector observed 2 WMI Production personnel continuing to perform fitting activities on the previously completed sections of the SAS-EB Traveler. The QA Inspector observed that the sections had been previously relocated to the outside fabrication Bay # 6 and the sections appeared to be identified as the Elevated Truss, Fixed Stairs and Lower Truss Sections. During observation, the QA Inspector observed that various come alongs and chain falls were being utilized, during the fit-up process.

Near the end of the shift, the QA Inspector observed that the fit-up on the above mentioned three sections, appeared to still be in process, at this time.

E2/E3-EB Traveler

On this date, the QA Inspector observed WMI production welder Mr. Jose Rodriguez (WID # 3031) performing Flux Core Arc Welding (FCAW) in various positions on Tube Steel (TS) and connector plate material. The QA Inspector observed that the FCAW was being performed on the frame assemblies identified as A316, A324, A325

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A332 and B332, South Side section of the E2/E3-EB Traveler.

On this date, the QA Inspector observed WMI production welders Mr. Juan Jimenez (WID # 3059) and Mr. Eutimo Lopez (WID # 3035) continuing to perform Flux Core Arc Welding (FCAW) welding activities on the frame assembly identified as 7-A327, per the shop drawings.

The QA Inspector observed throughout the shift, that the FCAW was being performed in various positions, on the connector plate and Tube Steel (TS) material fillet and flare groove welds.

On this date, the QA Inspector observed WMI production welder Mr. Charles Newton (WID # 3200) performing fitting and flux core arc welding on tube steel material for the frame assembly identified as 3 A317-1.

During observation, the QA Inspector observed that the above mentioned personnel appeared to be splicing additional TS material, to this previously fabricated assembly. During observation, the QA Inspector observed that the joint preparation appeared to be a single bevel, Complete Joint Preparation (CJP) with backing and approximately 3 mm root opening.

The QA Inspector had been previously informed that these splices are required to lengthen the bottom section TS material to achieve proper fit up between the frame assemblies A332 and B332. The QA Inspector had been previously informed that the bottom section piece of TS material had been previously cut to length according to the Shop Drawing Bill of Material List. The QA Inspector also noted that the activities being performed, prior to WMI submitting a Request for Information (RFI), in regards to this additional work.

Later in the shift, the QA Inspector observed SE QC Inspector Mr. Ruben Dominguez performing Ultrasonic Testing (UT) on the above mentioned Complete Joint Penetration (CJP) weld joints.

Initially, the QA Inspector observed Mr. Dominguez utilizing what appeared to be a .500" (12 mm) diameter, 2.25 MHz transducer, to perform a straight or longitudinal beam lamination scan, on the base metal areas in which the subsequent angle beam inspection will be performed.

After performing the lamination scan, Mr. Dominguez then explained to the QA Inspector that no rejectable indications were found.

The QA Inspector then observed Mr. Dominguez utilizing what appeared to be a 70 degree Lucite wedge coupled to a .500" (12 mm) diameter, 2.25 MHz transducer, to perform a shear wave inspection, on the above mentioned weld joints.

During observation, the QA Inspector noted that the scanning pattern being performed by Mr. Dominguez appeared to be in compliance with AWS D1.1 2002, Figure 6.24 and that the testing appeared to be 100% coverage.

During observation, the QA Inspector noted that the above mentioned testing appeared to be in compliance with the applicable testing procedure, SE-UT-CT-D1.1-104 Rev. 5.

After testing, Mr. Dominguez explained to the QA Inspector that no rejectable indications were found and an applicable form SE-UT-D1.1-CT-104, will be completed to document the acceptable testing results.

The QA Inspector randomly observed that Smith-Emery QC Inspector Ruben Dominguez was present, during the above mentioned welding and fitting activities.

During random observation, the QA Inspector observed that the applicable WPS's and copies of the shop drawings, appeared to be located near each work station, where the above mentioned welding and fitting activities were being performed.

The QA Inspector randomly verified that the consumable material, utilized during the welding appeared to be in compliance with the applicable WPS and that the above mentioned welders were currently qualified for the

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applicable process and position of welding.

The QA Inspector randomly observed QC Inspector Dominguez verifying the in-process welding parameters, including voltage, amperage, pre-heat and travel speed and the parameters appeared to be in compliance to the applicable WPS.

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.

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| Inspected By: | Vance,Sean | Quality Assurance Inspector |
| Reviewed By: | Edmondson,Fred | QA Reviewer |
