

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 #: 82.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016820**Date Inspected:** 07-Sep-2010**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:** R. Rodriguez, R. 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 of the Travelers. The QA Inspector arrived on site to randomly observe the WMI Quality Control (QC) Inspectors in process and completed visual and nondestructive testing. Upon the arrival of the QA Inspector the following observations were made:

Traveler E2/E3-EB

On this date, the QA Inspector observed Westmont Industries (WMI), production welders Juan Mora, (WID # 3121) and Juan Jimenez (WID # 3059), performing weld tack welding and fitting activities, for the fabrication of the E2/E3-EB Travelers. The QA Inspector observed Mr. Jimenez utilizing the Flux Core Arc Welding (FCAW) process to perform the tack welding and Mr. Mora helping to fit the tube steel, which is being tack welded. The QA Inspector observed that Mr. Jimenez was utilizing a Miller brand machine and wire feeder, to perform the tack welding and that Ultracore 71A85 (.045") diameter wire was being utilized, for the filler metal. The QA Inspector observed that the tack welding was being performed on the Rectangular and Square Tube Steel, which was previously cut to length and that the material was being placed in a fabrication "Jig", by Mr. Mora. The QA Inspector observed that the fabrication Jig, consisted of a flat steel fabrication table, which had small pieces of steel angle tack welded to the table and observed that the pattern and location of the angle, allows the tube steel material to be fabricated in a flat planar dimension and appears to be an efficient method of fabricating Traveler assemblies which are identical, per the approved shop drawings. The QA Inspector observed that once the tack welding was complete, that Mr. Mora then placed the assemblies on the Bay 4 shop floor. The QA Inspector observed that Smith-Emery QC Inspector Ruben Dominguez was present, during the welding activities and Mr. Dominguez explained that an approved Welding Procedure Specification (WPS) was being utilized to perform the

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tack welding. The QA Inspector observed that the applicable Welding Procedure Specifications (WPS's), were nearby the work area. The QA Inspector observed that the above mentioned tack welding and fabrication continued throughout the shift and the FCAW tack welding, appeared to be in compliance with the applicable WPS's.

Trolley Test Stand

On this date, the QA Inspector observed Westmont Industries (WMI), production welder Daniel Grayum, (WID # 3048), performing welding activities, for the fabrication of the Trolley Test Rack. The QA Inspector observed Mr. Grayum utilizing the Flux Core Arc Welding (FCAW) process and that Mr. Grayum was currently qualified to perform the FCAW process. The QA Inspector observed that Mr. Grayum was utilizing a Miller brand machine and wire feeder, to perform the welding and that Ultracore 71A85 (.045") diameter wire was being utilized, for the filler metal. The QA Inspector observed that Smith-Emery QC Inspector Ruben Dominguez was present, during the welding activities and Mr. Dominguez explained that an approved Welding Procedure Specification (WPS) was being utilized to perform the FCAW. The QA Inspector observed that the tack welding was being performed on the Gusset plates and Beams, for the fabrication of the the Rail Support Beam Assembly 3-A5 (Reference Drawing # TTC-5). The QA Inspector observed that the applicable WPS's were nearby the work area and that QC Dominguez had randomly verified the welding parameters, utilizing a TPI296 Amprobe, which had a calibration date of 5/22/10. The QA Inspector observed QC Dominguez verifying pre-heat temperature, utilizing a hand held CEN-TECH Infrared Thermometer and verify the FCAW travel speed was in compliance with the applicable WPS.

The QA Inspector observed that the FCAW parameters, pre-heat temperatures and FCAW appeared to be in compliance with the WPS.

See attached picture below.



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
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Reviewed By:	Edmondson,Fred	QA Reviewer
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