

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-016847**Date Inspected:** 09-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 welder Eutimo Lopez (WID # 3035), continuing to perform Flux Core Arc Welding (FCAW) on the E2/E3-EB Traveler frames. The QA Inspector observed Mr. Lopez performing the FCAW on previously fit and tack welded Tube Steel (TS) on the Frame Assembly 1 and 2, identified as A214 and A216, per the approved shop drawings. The QA Inspector observed that Mr. Lopez was utilizing a Miller brand machine and wire feeder, to perform the FCAW and that Ultracore 71A85 (.045") diameter wire was being utilized, for the filler metal.

The QA Inspector observed Westmont Industries (WMI), production welder Daniel Grayum (WID # 3049), performing Flux Core Arc Welding (FCAW) on the E2/E3-EB Traveler frames. The QA Inspector observed Mr. Grayum performing the FCAW on previously fit and tack welded Tube Steel (TS) on the Frame Assembly 4, identified as A218, per the approved shop drawings. The QA Inspector observed that Mr. Grayum was continuing to utilize a Miller brand machine and wire feeder, to perform the FCAW and that Ultracore 71A85 (.045") diameter wire was being utilized, for the filler metal.

The QA Inspector observed Westmont Industries (WMI), production welder Juan Mora (WID # 3121) and a

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production helper, performing tack welding and fitting activities, for the fabrication of the E2/E3-EB Travelers. The QA Inspector observed Mr. Mora utilizing the Flux Core Arc Welding (FCAW) process and that Mr. Mora was currently qualified to perform the FCAW tacking. The QA Inspector observed that Mr. Mora 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 the FCAW tacking was being performed on the Rectangular and Square Tube Steel, which was previously cut to length, on a flat steel fabrication table. The QA Inspector observed that the production helper was tacking small pieces of cut angle, to the fabrication table and then laying out the TS material for Mr. Mora to then tack weld the pieces together. The QA Inspector observed that the pieces being assembled were identified as Frame assemblies for the E2/E3-EB Traveler and each piece had been previously identified, per the approved shop drawing Bill of Material list.

The QA Inspector observed that Smith-Emery QC Inspector Ruben Dominguez was present, during the above mentioned welding and tacking activities and Mr. Dominguez explained that approved Welding Procedure Specifications (WPS's) were being utilized. Mr. Dominguez explained that the in-process welding parameters were randomly verified including voltage, amperage, pre-heat and travel speed. Mr. Dominguez explained that the parameters were in compliance to the applicable WPS and the QA Inspector randomly verified these parameters and concurred with QC Inspector Dominguez.

The QA Inspector observed that the above mentioned activities continued throughout the shift and appeared to be in compliance with the contract requirements.

Trolley Test Stand

On this date, the QA Inspector observed QC Inspector Dominguez performing random Visual and Magnetic Particle Testing (VT/MT), on the previously completed Rail Support Assemblies, for the Trolley Test Stand. QC Inspector Dominguez explained that 100% Visual and 10% Magnetic Particle Testing was being performed on the completed welds, in accordance with AWS D1.1 2002 and the approved WMI MT Procedure SE-MT-CT.D1. 1-105, Rev1. After the testing was complete on the assemblies, QC Inspector Dominguez explained that he had found no rejectable indications. See attached picture below.



Summary of Conversations:

QCM Rick Rodriguez explained that he was in-process of generating 11" x 17" copies of the approved shop drawings for the project. Mr. Dominguez explained that the drawings will be utilized for the assignment of weld joint numbers, for tracking purposes and identification of the weld joint numbers.

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