

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-017074**Date Inspected:** 21-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:

Trolley Test Stand

The QA Inspector observed Smith Emery QC Inspector Ruben Dominguez performing Ultrasonic Testing (UT), on the previously completed weld repairs. The QA Inspector observed that the testing was being performed on the Rail X Flange Complete Joint Penetration (CJP) splices, designated as weld joints #'s TS1, TS2, BS1 and BS2. The QC Inspector Dominguez explained that the testing was being performed, in accordance to approved procedure SE-UT-CT-D1.1-104 Rev. # 2. The QA Inspector observed that the Gas Metal Arc Welding (GMAW), for the repairs, was performed by WMI welder # 3031, Mr. Jose Rodriguez and the QA Inspector had previously verified that Mr. Rodriguez was currently qualified, to perform the GMAW. The QA Inspector observed QC Inspector Dominguez utilizing a 70 degree Lucite wedge, attached to a 2.25 MHz transducer, to perform the Shear Wave Ultrasonic testing, on the above mentioned weld repairs. The QA Inspector observed QC Inspector Dominguez utilizing a Krautkramer USN 52L testing instrument and during the testing, the scanning pattern appeared to be in compliance with AWS Fig. 6.24. After testing was complete, QC Inspector Dominguez explained that no rejectable indications were found and an applicable Ultrasonic Testing report will be completed, for the inspection.

Traveler Test Rack

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On this date, the QA Inspector observed Westmont Industries (WMI), production welder Alberto Cortes (WID # 3141) performing Flux Core Arc Welding (FCAW) tacking and grinding activities for the Traveler Test Rack. The QA Inspector observed that Mr. Cortes was utilizing a Miller brand machine and wire feeder, to perform the FCAW tacking and that Ultracore 71A85 (.045") diameter wire was being utilized, for the filler metal. The QA Inspector observed that the FCAW Tacking and grinding activities were being performed on the support columns, for the Traveler Test Rack.

E2/E3-EB Traveler

On this date, the QA Inspector observed Westmont Industries (WMI), production personnel Larry Swanson and Raymundo Anaya performing Flux Core Arc Welding (FCAW) fitting, tacking and grinding activities for the Traveler Frames. The QA Inspector observed that Mr. Swanson and Mr. Anaya were performing these activities on the backing bars, which will be utilized for the Complete Joint Penetration (CJP) Traveler Frame splices. The QA Inspector observed the above mentioned personnel, cutting and beveling 4 each pieces of backing bar material. After the material was cut and beveled, the QA Inspector observed the pieces of material being placed or fit into the end of the TS material. After the pieces were fit, the QA Inspector then observed Mr. Swanson FCAW tack weld the 4 pieces of material and then remove the tack welded backing bar. The QA Inspector then observed Mr. Swanson FCAW the 4 each ends of the backing bar. After the FCAW was complete, the QA Inspector then observed Mr. Swanson grind flush the 4 each welds and then contour or "round off" the corners of the backing bar. The QA Inspector observed that the grinding continued until the completed backing bar, achieved a tight fit on the interior of the TS end. The QA Inspector observed that the backing bar material being utilized was A572 Gr. 50 and listed in the same group as the base metal, per the applicable Welding Procedure Specification (WPS) requirements.

On this date, the QA Inspector observed Westmont Industries (WMI), production welder Eutimo Lopez (WID # 3035), continuing to perform Flux Core Arc Welding (FCAW) activities 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, identified as B235, 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 that Smith-Emery QC Inspector Ruben Dominguez was present, during the above mentioned welding and tacking activities and QC Inspector Dominguez explained that approved Welding Procedure Specifications (WPS's) were being utilized. QC Inspector Dominguez explained that the in-process welding parameters were randomly verified including voltage, amperage, pre-heat and travel speed and explained that the parameters were in compliance to the applicable WPS. The QA Inspector randomly verified these parameters and concurred with QC Inspector Dominguez.

See attached pictures below.

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Summary of Conversations:

On this date, the QA Inspector was requested by Namasco Steel Representative, Raymond Flores, to perform an inspection on cut plate material. See completed TL6011, on this date, for additional details.

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
Reviewed By:	Edmondson, Fred	QA Reviewer
