

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-018573**Date Inspected:** 03-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**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 observed WMI production personnel performing fitting, welding and cutting activities on various assemblies for the Traveler Test Rack.

SAS-EB Traveler**Fixed Stairs Section**

On this date, the QA Inspector observed Westmont Industries (WMI) production welder, Mr. Jose Rodriguez (WID # 3031), continuing to perform Flux Core Arc Welding (FCAW) activities on the previously fit Frame assemblies, identified as 10-A237, 11-B237, 3-A217, 4-A218, 5-A223 and 6-A224. 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.

Lower Truss Section

On this date, the QA Inspector observed Westmont Industries (WMI) production welder, Mr. Eutimo Lopez (WID # 3035), continuing to perform Flux Core Arc Welding (FCAW) activities on the previously fit Frame assemblies, identified as 12-A240, 13-B240, 7-A225, 8-A226 and 9-A230. 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

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fillet and flare groove welds.

E2/E3-EB Traveler

On this date, the QA Inspector observed WMI production welder Mr. Juan Jimenez (WID # 3059) continuing to perform Flux Core Arc Welding (FCAW) welding activities on the intermediate and diagonal bracing Tube Steel (TS) material. The QA Inspector observed that the FCAW being performed by Mr. Jimenez appeared to be for the Frame Assemblies identified as 9-A332 and 10-B332, per the shop drawings. The QA Inspector observed that the weld joints appeared to be designated as fillet and flush flare groove welds and that Mr. Jimenez appeared to be performing the FCAW in the flat (1G) and vertical (3F) positions, throughout the shift.

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 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:

On this date, the QA Inspector was requested by WMI Director of Quality Assurance (QA) Curt Bell to perform an inspection on material at Pacific Coast Bolt, which will be utilized in the fabrication of the Travelers. After the request and prior to arriving at Pacific, the QA Inspector requested information from WMI Engineering Dept. As part of the request, the QA Inspector asked WMI what the material is identified as and where the material will be utilized in the fabrication of the Travelers. WMI then explained that the material is identified as A307 galvanized bolt material and will be utilized as Hinge Pins for the elevating platform and balcony assemblies. The QA Inspector and WMI then referenced the applicable Drawing Sheet # 1084R1 and 1085R1. Per these sheets, the QA Inspector observed that the Hinge Pin material is designated as A307 bolt or equivalent, galvanized. The QA Inspector also observed that per the drawings, the Hinge Pins are required to have a 3 mm diameter drilled hole, with an attached grease nipple, for lubrication purposes. After observing this, the QA Inspector then asked WMI if Pacific Bolt will be performing the drilling operations on the holes. WMI explained that Pacific will not be performing this operation and that a WMI machinist will be, at a later date. WMI explained that Pacific Bolt will be providing and performing the threading operations on the Hinge Pin material, per the drawing details. After conversation with WMI, the QA Inspector then arrived at Pacific Bolt, in Santa Fe Springs, CA. Upon arrival, the QA Inspector met with Pacific sales Representative Mr. George Bilezikjian who then explained that the material is located and staged in what appeared to be a warehouse and then proceeded to show the QA Inspector the location of the material. Prior to locating the material, the QA Inspector noted that per the contract drawings, the fabricator is to provide mill certificates for the materials used in the fabrication of all pins. The QA Inspector then requested the mill certificates for the Hinge Pin material and Mr. Bilezikjian explained that he wasn't informed by WMI that these were needed, only that a visual inspection be performed on the material. Mr. Bilezikjian further explained that these would be difficult to obtain, but he will be able to provide these within a few days. Mr. Bilezikjian also explained that this was not a rush order by WMI and that the threading of the material will be approximately one half day production work to complete. The QA Inspector then explained to Mr. Bilezikjian that once the mill certificates are received, to notify the QA Inspector directly and that an inspection will then be performed on the

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above mentioned material. The QA Inspector then arrived back at WMI to observe the in process fabrication of the Travelers. After approximately 20 minutes, the QA Inspector received a phone call from Mr. Bilezikjian. Mr. Bilezikjian explained that he did indeed have the mill certificates for the material and requested that the QA Inspector perform an inspection on the material.

Once again, the QA Inspector then arrived at Pacific Bolt as requested and proceeded to perform an inspection on the above mentioned material. After inspection, the QA Inspector observed that the material appeared to be in compliance with the contract requirements and is listed as follows:

9 each 1.25" x 4.172" ASTM A307 Gr. B Rounds

7 each 1.125" x 3.5" ASTM A307 Gr. B Rounds

See attached pictures below.

On this date, the QA Inspector was notified by Structural Materials Representative (SMR), Mr. Kit Guest that WMI has a METS verbal OK to proceed with the weld repairs. The QA Inspector noted that these were previously discovered fillet weld cracks (Submittal # 002008R00) on the previously tested joints identified as # 41, # 42 and # 43 SAS-EB Frame Assembly identified as 6-A224. The QA Inspector had been previously informed by WMI Director of Quality Control Mr. Curt Bell that production requested to start the weld repairs, on the following day, 12/4/10.



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