DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 82.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-017319
Date Inspected: 06-Oct-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Westmont Industries

OSM Arrival Time: 700
OSM Departure Time: 1530
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

On this date, the QA Inspector observed Westmont Industries (WMI), production welder Jose Rodriguez (WID # 3031) performing Flux Core Arc Welding (FCAW) activities, for the Trolley Test Stand. The QA Inspector observed that Mr. Rodriguez was utilizing a Miller brand machine/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 Mr. Rodriguez was performing the FCAW in the 1G (flat) position and the fit up preparation appeared to be a Complete Joint Penetration (CJP), 45 degree double bevel. The QA Inspector observed that the FCAW was being performed on the piece mark identified as Rail X web splice, per the shop drawing # WMI-TTC-4 and Mr. Rodriguez appeared to be depositing the FCAW root pass. After the root pass was complete, the QA Inspector observed Mr. Rodriguez perform backgouging, utilizing the Carbon Arc process, to remove the root pass to sound metal.

See attached pictures below.

SAS-EB Traveler
Elevated Truss Section

On this date, the QA Inspector observed Westmont Industries (WMI), production welder Raymundo Anaya and production fitter, Cesar Canales continuing to perform activities for the fabrication of the Travelers. The QA Inspector observed Mr. Anaya and Mr. Canales continue to fit up and FCAW tack weld the frame assemblies identified as A235, B235, A214 and A216. During the fit up and tack welding, the QA Inspector observed Mr. Anaya and Mr. Canales occasionally reference the shop drawings nearby the fabrication area, to verify dimensions, prior to tacking. The QA Inspector observed that temporary pieces of angle iron were being tack welding in various locations to support the frame assemblies, during the fit up process. On this date, the QA Inspector observed Westmont Industries (WMI), production welder Daniel Grayum (WID # 3049), continuing to perform Flux Core Arc Welding (FCAW) activities for the E2/E3-EB Traveler frames. The QA Inspector observed Mr. Grayum performing the FCAW in the overhead position and the FCAW was being performed on the previously tack welded Wide Flange Beams (WFB's), to A214 and A216 Traveler Frame assemblies. The QA Inspector observed that Mr. Grayum 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.

See attached pictures below.

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 for 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 B237, per the 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. The QA Inspector randomly observed that the applicable WPS's and copies of the shop drawings, were located near each work station, where the above mentioned FCAW and fitting activities were being performed. 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 appeared to be in compliance to the applicable WPS.

WELDING INSPECTION REPORT

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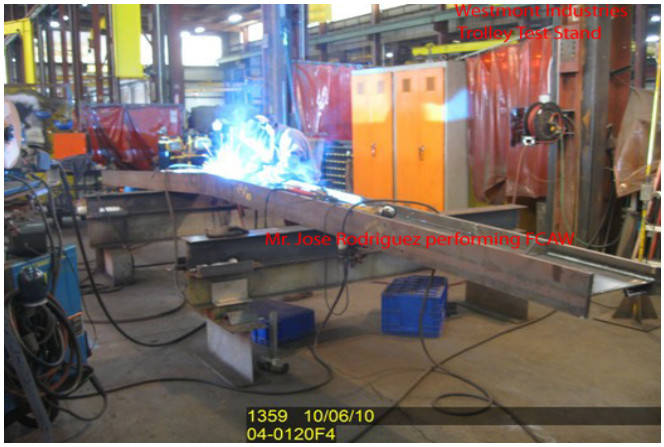

Summary of Conversations:

On this date, the QA Inspector was requested by WMI QCM Rick Rodriguez to perform an inspection on plate material at Namasco Steel, Santa Fe Springs, CA. At approximately 1000, the QA Inspector arrived at Namasco and met with Mr. Raymond Flores. Mr. Flores explained that plate material has been received by Namasco and will be cut, per the cutting instructions, provided by WMI. Mr. Flores further explained that 1 each plate will be shipped to Pacific Saw Cutting, Placentia CA., for the saw cutting operations, per WMI cutting instructions and then shipped to Palomo's Steel, Long Beach CA. The QA Inspector noted that Namasco and Palomo's Steel are material suppliers to WMI, for which the material will be utilized for the fabrication of the Travelers. Mr. Flores then explained that some of the plate material is located in the production bay, where cutting operations are performed and the remainder of the material is located in the outside laydown storage area. Mr. Flores then provided the QA Inspector with Mill Test Reports (MTR's), for the material to be inspected. The QA Inspector was then shown a stack of three plates and the material appeared to have identifying numbers written on each piece of material, which included material grade, size heat number, etc. The material identifying numbers appeared to match the Mill Test Reports (MTR's) which were provided to the QA Inspector. The QA Inspector then wrote "OK to Cut' on the material, utilizing a yellow paint stick marker. The QA Inspector also wrote "OK to Cut" on the applicable MTR's, utilizing a ball point pen and was then provided copies. The QA Inspector observed that the material appeared to be in compliance with the contract requirements and is listed as follows:

1 Each Plate Material A572 Gr. 50-.3125"x 96" x 240"-Ht. # NT7683
4 Each Plate Material A572 Gr. 50-.625"x 120" x 482"-Ht. # AOH914
1 Each Plate Material A572 Gr. 50-.3125"x 60" x 240"-Ht. # E3H097

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