

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:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-026725**Date Inspected:** 14-Nov-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 600**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1430**Contractor:** Westmont Industries**Location:** Santa Fe Springs, CA**CWI Name:** Chris Concha**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:** Maintenance Travelers**Summary of Items Observed:**

On this date, Caltrans Quality Assurance Inspector (QA) Sherri Brannon is present at the Westmont Industries (WMI) jobsite in Santa Fe Springs, California for the purpose of observing fabrication and QC functions for the SAS Superstructure, Bid Item #99, Maintenance Traveler and Bid Item #100, Maintenance Traveler (Bike Path).

Miscellaneous Traveler Modifications

This QA Inspector randomly observed WMI qualified welder Mr. Richard Fuentes WID #3201 performing layout, fitting and tack welding on two (2) platform balconies for the SAS Traveler balcony modifications. This QA Inspector observed Mr. Fuentes performing the FCAW in all positions randomly throughout the shift. Note: The two balconies for the SAS Travelers had been completed previously. See CCO 183 – Miscellaneous Traveler Modifications for additional information. WMI is aware that they are proceeding at their own risk pending drawing approval.

SAS WB Traveler

This QA Inspector randomly observed WMI production personnel Mr. Cesar Canales WID #3195 and Mr. Jesus Rayas WID#3197, performing layout, fitting and tack welding activities at various locations for the SAS WB Traveler Assemblies. This QA Inspector observed Mr. Rayas performing the FCAW in all positions randomly throughout the shift.

This QA Inspector randomly observed WMI production welder Mr. Eutimo Lopez (WID # 3035) continuing to perform Flux Core Arc Welding (FCAW) activities on the SAS-WB Traveler Assemblies. This QA Inspector observed Mr. Lopez performing the FCAW in all positions on tube steel and plate material, randomly throughout

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the shift.

Traveler Mechanical Assemblies

This QA Inspector randomly observed WMI qualified welder Mr. Daniel Grayum (WID # 3049) performing fitting, tack welding and welding activities on mechanical console box frames for the Maintenance Travelers.

Heat Straightening

This QA Inspector was informed by WMI Cesar Canales that WMI will be heat straightening E2/E3 Bike Path Traveler assembly C17, W150x14 (w 6x9) MK # 16, beam due to bending when moving into bay 6 for painting. QA Inspector Brannon randomly observed WMI Mr. Canales performing heat straightening. Heat Straightening is performed by flame straightening using a portable torch with. QA Inspector Brannon also, observed Smith Emery, CWI, QC Inspector Mr. Chris Concha monitoring heat straightening process. Heat straightening appeared to generally comply with contract documents.

This QA Inspector randomly observed that Smith Emery, CWI, QC Inspector Mr. Chris Concha was present, during the above mentioned welding and fitting activities. During random observation, this 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. This 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. This QA Inspector randomly observed QC Inspector Mr. Concha 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.

RPI Coating (Blast and Paint)

This QA Inspector performed random shop observations and observed that RPI is on site to continuing with the coating application on the Maintenance Travelers. QA Inspector was informed by RPI Coating Mr. Preston Keen that RPI and WMI will moving the SAS/E2-E3 Elevating Platforms and the E2/E3 Bike Path Traveler Assemblies into bay 6 for coating operations this morning. Mr. Keen stated that RPI will be performing tests, pressure wash, mist coat and also applying the final top on the E2/E3 Bike Path Traveler Trolley Train Links in the afternoon.

Mr. Keen informed QA Inspector that on the interim coating of the Sherwin Williams Zinc Clad II, Inorganic Zinc Rich prime coating he would be performing ASTM D4541 – Standard Test Method for Pull-Off Strength of Coating Using Portable Adhesion Tester, ASTM D3363 - Film Hardness by Pencil Test, ASTM D4752 Measuring MEK Resistance to Ethyl Silicate (Inorganic) Zinc-Rich Primers by Solvent Rub and performing the Quarter test at section 3 and Caltrans test plate. Mr. Keen stated that he will be using a calibrated Elcometer Hydraulic Adhesion Tester Model 108 for the adhesion test and Sherwin Williams R7 KIII High Solids compliant thinner #1 for the solvent rub test. Testing observed is as follows: E2/E3 Bike Path Traveler Trolley Train Links Prime coated on 11-11-11 completed at 1300 hour, test performed on 11-14-11 at 1309 hour, Adhesion Test – 850 psi, Pencil Test (pass), Quarter Test (pass) and Rub test (pass). After completion of test QA observed RPI coating hand sanding using 80 grit sand paper, pressure wash and blow dry using compressed air and apply mist coat using the Sherwin Williams Polysiloxane XLE-80.

This QA Inspector performed measurement on dry film thickness with Type 2 (magnetic gage), DFT's thickness

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reading on the E2/E3 Bike Path Traveler Trolley Links Sherwin Williams Zinc Clad II Plus prime coating on the three (3) areas, reading are an average of three (3) thickness reading on the areas are as follows: 5.4 mils, 5.5 mils, and 4.0 mils, average dry film thickness 4.9 mils.



Summary of Conversations:

As stated within this report.

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: Brannon, Sherri

Quality Assurance Inspector

Reviewed By: Lanz, Joe

QA Reviewer
