

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-029670**Date Inspected:** 06-Jun-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** USA Hoist**Location:** Crest Hill, IL

<b>CWI Name:</b>	Robert Zimny		
<b>Inspected CWI report:</b>	Yes	No	N/A
<b>Electrode to specification:</b>	Yes	No	N/A
<b>Qualified Welders:</b>	Yes	No	N/A
<b>Approved Drawings:</b>	Yes	No	N/A

<b>CWI Present:</b>	Yes	No	
<b>Rod Oven in Use:</b>	Yes	No	N/A
<b>Weld Procedures Followed:</b>	Yes	No	N/A
<b>Verified Joint Fit-up:</b>	Yes	No	N/A
<b>Approved WPS:</b>	Yes	No	N/A
<b>Delayed / Cancelled:</b>	Yes	No	N/A

**Bridge No:** 34-0006**Component:** SAS Tower Elevator**Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at USA Hoist, Crest Hill, IL as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At USA Hoist assembly shop, this QA randomly observed USA certified welder Manolo Luna continuing to perform 2F (horizontal) position gas shielded Flux Cored Arc Welding (FCAW-G) welding ¼" fillet repair between 1 ¾" diameter x 7/8" thick rack pad to 6" x 6" x 3/8" thick tube steel tower mast. The welder was noted using gas shielded FCAW-G with 1.1mm E71T-1C/M-H8 Familiarc DW-50 wire electrode implementing USA Hoist Welding Procedure Specification FCAW 3210. The shielding gas being used was noted a combination of 75% Argon and 25% CO2 with flow rate of 40 CFH. During the shift, the working welding parameters was measured 27 volts and 200 amperes which deemed in compliance to the project requirements. At the end of the shift, fillet welding repair on the undersize ¼" fillet all around the rack pad was still continuing on various tower steel masts and should remain tomorrow.

At the same shop, this QA randomly observed USA Hoist welder Matt Wasiqi continuing to perform 1F fillet welding between the 4 ½" x 3" x 3/8" thick stiffener plate and 5" x 3 ½" x 1/2" thick bent plate rear tie in bracket. The ¼" fillet weld is being welded per USA shop drawing 914204-11. The welder was noted using gas shielded FCAW-G with 1.1mm E71T-1C Familiarc DW-50 wire electrode implementing USA Hoist Welding Procedure Specification FCAW 3210. The shielding gas being used was noted a combination of 75% Argon and 25% CO2 with flow rate of 35 CFH. During the shift, the working welding parameters were measured 29 volts and 230 amperes which deemed in compliance to the project requirements. At the end of the shift, ¼" fillet welding on all

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# WELDING INSPECTION REPORT

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sides of the stiffener plate to the rear tie in bracket was still continuing and should remain tomorrow. As of today, around 50% rear tie-in brackets (out of 142 pieces required) were completed.



## Summary of Conversations:

No significant conversation occurred today.

## 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 SMR Gary Thomas 916-764-6027, who represents the Office of Structural Materials for your project.

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**Inspected By:** Lizardo, Joselito

Quality Assurance Inspector

**Reviewed By:** Foerder, Mike

QA Reviewer

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