

**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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000861**Date Inspected:** 03-Oct-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Le Feng**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:** 114 Meter Mock-Up**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) representative Roscoe Dixon arrived at Zhenhua Port steel fabrication welding shop of Shanghai, China to periodically monitor Quality Control (QC) functions. While on site this QA Inspector performed or observed the following welding related activities associated with the fabrication of the Mock-U114.

The ZPMC Quality Control Inspector, Mr. Ley Tao informed this QA Inspector Dixon that ZPMC would be performing weld repair on the 114 Meter Mock-Up MUSC-MA107-1 Skin Face A lower at Two areas one on stiffener plates Mp1002-1 and one at MP1002-2 was being prepped with a grinder by ZPMC personnel.

The Certified Welding Inspector (CWI) Xu Le Feng identified the welder as Jiang Zhou (ID) number 040261. Mr Zhou was utilizing ZPMC weld procedure Specification (WPS) WPS-345-FCAW-2G (2F) Repair to perform the weld repairs.

This QA Inspector Dixon observed CWI Le Feng monitoring the weld parameters which he documented as follows: Welding amperage 310, welding voltage, 31.5 with a travel speed of 310 millimeters per minute.

This QA Inspector also performed a random verification of the weld parameters and they appeared to comply with the approved ZPMC WPS listed above.

This QA Inspector witnessed ZPMC personnel preparing the longitudinal stiffener (p268) at the junction of Skin Plate A58 to perform the root pass of weld # 2 by preheating the of stiffener . This QA Inspector witnessed no

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welding at this location on this date.

This QA Inspector Dixon observed the grinding preparation and preheating of the 114 Meter Mock-Up Skin Face C interior splice assembly A67, Mr. Ley Tao informed this QA Inspector that welding is to be performed at stiffener plate P920-9 weld # 2 to Skin plate A67.

The minimum preheat required for welding this section per the approved ZPMC weld procedure Specification was not achieved during this QA Inspector's shift, therefore no welding was witnessed by this QA Inspector on interior splice assembly A67 date.

**Summary of Conversations:**

As noted above and basic communication between QC Inspector and QA inspector when and where welding inspections are to be performed.



**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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Dixon,Roscoe	Quality Assurance Inspector
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<b>Reviewed By:</b>	Cochran,Jim	QA Reviewer
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