

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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-007880**Date Inspected:** 08-Jul-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** LIU DAO 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:** TOWER COMPONENT**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance(QA) Inspector, Subhasis Bera was present during the times noted above for observations relative to the work being performed.

In process Inspection

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This QA Inspector randomly observed ZPMC welding personnel performing groove welding of weld joint SD1-A6002-18-2A, SD1-A6002-17-4B-2A & SD1-A6002-16-4B-2A filler passes at Skin Plate of South Tower lift -IV. The personnel were observed welding in the 1G position utilizing a SAW process. Welder is identified as 040634. The welding variables recorded by QC appeared to comply with the WPS- B – T-4221-B-U3c-S-1.

This QA Inspector randomly observed ZPMC welding personnel performing groove welding of weld joint WD1-A6003-1-4B-3A, WD1-A6003-2-4B-3A, WD1-A6003-1-1A-2B and WD1-A6003-2-1A-2B filler passes at Skin Plate west side tower lift -IV. The personnel were observed welding in the 1G position utilizing a SAW process. Welder is identified as 042195. The welding variables recorded by QC appeared to comply with the WPS- B – T-4221-B-U3c-S-1.

This QA Inspector randomly observed ZPMC welding personnel performing groove welding of weld joint WSD1-FCSA4-2A/C-84B, 85B & 86B filler passes at Skin Plate of West Tower lift -IV. The personnel were observed welding in the 1G position utilizing a SAW process. Welder is identified as 041716. The welding variables recorded by QC appeared to comply with the WPS- B – T-4221-B-U3c-S-3.

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This QA Inspector randomly observed ZPMC welding personnel performing fillet welding of weld joint ESD1-FCSA4-2B/C-2 filler passes at Skin stiffeners to Skin Plate. The personnel were observed welding in the H position utilizing a FCAW process. Welders are identified as 066687,066882,066763&066443. The welding variables recorded by QC appeared to comply with the WPS- B – T-2332-Tc-P5-F.

This QA Inspector randomly observed ZPMC welding personnel performing fillet welding of weld joint ESD1-FCSA4-2C/C-10 filler passes at stiffeners to Skin Plate. The personnel were observed welding in the H position utilizing a SMAW process. Welder is identified as 046704. The welding variables recorded by QC appeared to comply with the WPS- B – T-3312-Tc-P5.

This QA Inspector randomly observed ZPMC welding personnel performing fillet welding of weld joint ESD1-FCSA4-2F/F-2,3 filler passes at stiffeners to Skin Plate . The personnel were observed welding in the 2F position utilizing a FCAW process. Welder is identified as 037907. The welding variables recorded by QC appeared to comply with the WPS- B – T-2332-Tc-P5-F.

Caltrans Quality Assurance Inspector (QA) observed ZPMC welding personals (042218&066164) stop and restart Flux Cored Arc Weld (FCAW) pass without cleaning the “crater area” of the weld prior to resuming the welding process. This incident observed on inside west Tower Lift-II (B to C Corner Diagonal Plate to Skin “C”)on weld joint identified as WS01-TL6-J/L-58.

For more information please see incident report generated this day.

Caltrans Quality Assurance Inspector observed ZPMC personnel Tack Welder (203272) performing Tack welding without the required preheat. This occurred on Strut Splice Plate (material A709SL-Gr-485 ,thickness 70mm), weld joint SD1-A5012-5-1B. The measured temperature was 90 deg C; the required preheat temperature according to approved WPS is Min.180 deg C.

For more information please see incident report generated this day.

Ultrasonic Testing

Bay #11

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as

WSD1-FESA4-4A/F-21,23A/B

WSD1-FBSA4-4A/F-51,52A/B

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations

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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 Serge Sinevod (13482570045), who represents the Office of Structural Materials for your project.

Inspected By:	Bera,Subhasis	Quality Assurance Inspector
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Reviewed By:	Prue,Erik	QA Reviewer
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