

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-011186**Date Inspected:** 09-Jan-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Chen Ying Xin, Tu Jun**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**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaiwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

BAY 10 TOWER LIFT 3 CONNECT BEAM

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% and random Visual Testing (VT) 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 Tower Components. The weld designations reviewed are as follows.

ED1-STSA3-2-109M-1-3, 24, 10, 11, 61, 64 A/B

This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 10

TOWER STRUT

SMAW welding of weld joint 48 located on ND1-STSA3-1-89M-1.

Welder is identified as 040268. ZPMC CWI is identified as Mr. Chen Ying Xin.

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

The welding variables recorded by QC appeared to comply with WPS-B-T-2112.

NORTH TOWER LIFT 4 A/B CORNER SEAM REPAIR

SMAW welding of weld joint 4A/B (Repair) located on NSTL4-3B/L.

Welder is identified as 056200. ZPMC CWI is identified as Mr. Wang Chuan Qing.

The welding variables recorded by QC appeared to comply with WPS-345-SMAW-4G(4F)-REPAIR.

This QA Caltrans Quality Assurance (QA) Inspector observed ZPMC personnel performing Flux Cored Arc Welding (FCAW) of complete joint penetration (CJP) weld attaching a temporary lifting lugs plate to outside of South Tower, lift 5, skin E (70 mm thickness), without sufficient base material preheat. This work was observed approximately 175mm from top of lift 5. This QA Inspector observed a 160 degree Celsius Tempilstik temperature indicator mark applied to the adjacent base material within approximately 30mm from the point of welding did not melt.

Attached photographs provide additional information.

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



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

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 134-8257-0045, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Umesh	Quality Assurance Inspector
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Reviewed By:	Clifford,William	QA Reviewer
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