

**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-010257**Date Inspected:** 31-Oct-2009**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**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 Gaikwad 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:

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

Bay 10

FCAW welding of weld joint 22 located on SD1-A440D/E-3.

Welder is identified as 057206. ZPMC CWI is identified as Mr. Du Zhi Qun.

The welding variables recorded by QC appeared to comply with WPS-B-T-2132.

FCAW welding of weld joint 12 located on ND1-A501D/E-1.

Welder is identified as 066164. ZPMC CWI is identified as Mr. Du Zhi Qun.

The welding variables recorded by QC appeared to comply with WPS-B-T-2132.

SMAW welding of weld joint 1A/B (Repair) located on ND1-A5012-35.

Welder is identified as 053049. ZPMC QC is identified as Mr. Yu Zhi Lai.

The welding variables recorded by QC appeared to comply with WPS-485-SMAW-2G(2F)-FCM-REPAIR-1.

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SMAW welding of weld joint 19 located on ED1-A6001-6.

Welder is identified as 040333. ZPMC CWI is identified as Mr. Chen Ying Xin.

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

SMAW welding of weld joint 1A/B (Repair) located on ED1-A5007-14.

Welder is identified as 040582. ZPMC QC is identified as Mr. Yu Zhi Lai.

The welding variables recorded by QC appeared to comply with WPS-485-SMAW-1G(1F)-FCM-REPAIR-1.

SMAW welding of weld joint 1A/B (Repair) located on ND1-A5002-25.

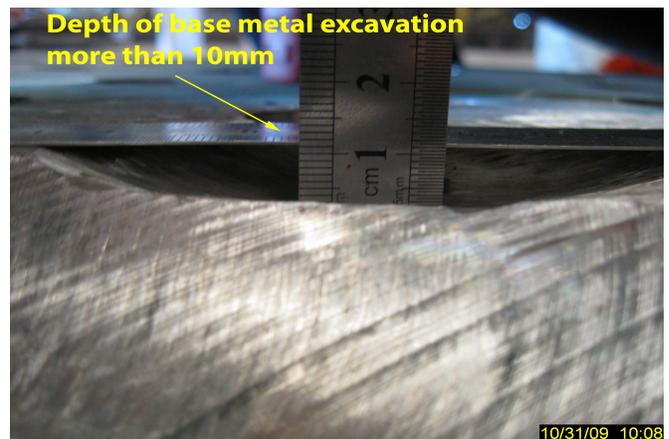
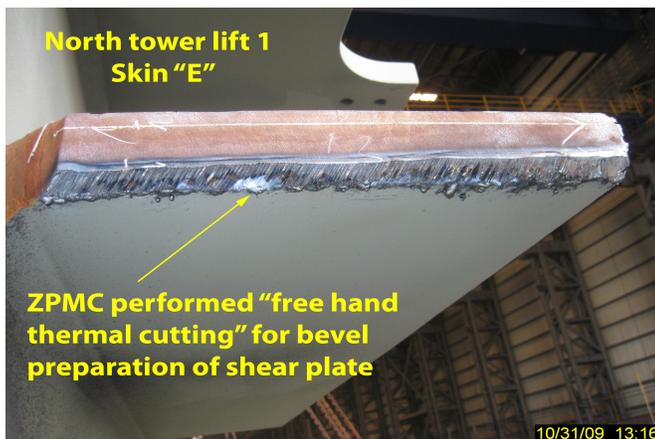
Welder is identified as 050289. ZPMC QC is identified as Mr. Yu Zhi Lai.

The welding variables recorded by QC appeared to comply with WPS-485-SMAW-2G(2F)-FCM-REPAIR-1.

During random verification Visual Testing (VT), Caltrans Quality Assurance (QA) Inspector observed that the base metal of the stiffener SPSA4-2-LS4-51 was excavated more than 10mm deep. The attached photographs provide additional detail.

During random verification Visual Testing (VT) of shear plates on skin E of North tower lift 1, located in the Tower bay no. 10, Caltrans Quality Assurance (QA) Inspector observed 'free hand thermal cutting' for bevel preparation being carried out by ZPMC personnel without approval by the engineer. This issue has an incident report. The attached photographs provide additional detail.

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



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## 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.

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**Inspected By:** Gaikwad,Umesh

Quality Assurance Inspector

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**Reviewed By:** Clifford,William

QA Reviewer