

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-008068**Date Inspected:** 31-Jul-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:** Ma Yun, 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:

Bay 10 Plange of Strut Plate

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT reports for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

ND1-A6002-8-3A/B (45X75mm Butt Joint)

ND1-A6002-6-3A/B (45X75mm Butt Joint)

Bay 11 Plange of Strut Plate

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT reports for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

SD1-A6002-10-5A/B (28X60mm Butt Joint)

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SD1-A6002-11-5A/B (28X60mm Butt Joint)
SD1-A6002-12-5A/B (28X60mm Butt Joint)
SD1-A6002-10-6A/B (28X60mm Butt Joint)
SD1-A6002-11-6A/B (28X60mm Butt Joint)
SD1-A6002-12-6A/B (28X60mm Butt Joint)

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

Bay 10

Shear Link Plate

SAW welding of weld joint 2B located on ND1-A6002-11.

Welder is identified as 050295. ZPMC QC is identified as Mr. Lu Wei Chao.

The welding variables recorded by QC appeared to comply with WPS-B-T-4221-B-U3c-S-1.

SAW welding of weld joint 4A located on ND1-A6002-16.

Welder is identified as 207745. ZPMC QC is identified as Mr. Yuan Hui Gang.

The welding variables recorded by QC appeared to comply with WPS-B-T-4221-B-U3c-S-1.

SAW welding of weld joint 5B located on ED1-A6003-7-2B.

Welder is identified as 040460. ZPMC QC is identified as Mr. Yuan Hui Gang.

The welding variables recorded by QC appeared to comply with WPS-B-T-4221-B-U3c-S-1.

North Tower Lift 4 Skin A to Stiffener

FCAW welding of weld joint 43A located on NSD1-FASA4-1E/E.

Welder is identified as 040345. ZPMC QC is identified as Mr. Chen Ying Xin.

The welding variables recorded by QC appeared to comply with WPS-B-T-2231-Tc-U5-F-1.

FCAW welding of weld joint 113A located on NSD1-FASA4-1E/E.

Welder is identified as 053869. ZPMC QC is identified as Mr. Chen Ying Xin.

The welding variables recorded by QC appeared to comply with WPS-B-T-2231-Tc-U5-F-1.

FCAW welding of weld joint 126A located on NSD1-FASA4-1E/E.

Welder is identified as 048784. ZPMC QC is identified as Mr. Chen Ying Xin.

The welding variables recorded by QC appeared to comply with WPS-B-T-2231-Tc-U5-F-1.

South Tower Lift 3 Corner Seam Skin A/E

FCAW welding of weld joint 84B located on SSSL3-1B/K.

Welder is identified as 040338. ZPMC QC is identified as Jiang La Mei.

The welding variables recorded by QC appeared to comply with WPS-B-T-2231-C-U2-F.

During random in-process visual inspection of South Tower Lift 3 corner seam A/E weld no. SSSL3-1B/K-84B, Caltrans Quality Assurance Inspector observed the width of a weld pass measured to be approximately 30mm. This Flux Core Arc Weld (FCAW) is a Complete Joint Penetration (CJP) performed in the flat position. The maximum FCAW weld pass width allowed in this position is 16mm. This QA inspector prepared an incident

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report of this issue.

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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