

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-014098**Date Inspected:** 14-May-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:** Yu Dong Ping, Yu Qi Guo**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 11, Shear Plate A20

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% and random Visual Testing (VT) of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated MT report for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

SD1-A20B/B-44, 45, 46, 49, 50

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

BAY11

TOWER STRUT PLATE

SMAW welding of weld joint 10A located on ED1-STSA4-10-119M-1.

Welder is identified as 046769. ZPMC QC is identified as Mr. Mao Bin Bin.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

The welding variables recorded by QC appeared to comply with WPS-B-T-2212-Tc-U5b.

SMAW welding of weld joint 8A located on ND1-STSA4-10-119M-1.

Welder is identified as 041271. ZPMC QC is identified as Mr. Mao Bin Bin.

The welding variables recorded by QC appeared to comply with WPS-B-T-3212-Tc-U5b-1.

BEARING STIFFENER ON WD1-A21 SHEAR PLATE

FCAW welding of weld joint 42 located on WD1-A21A/B.

Welder is identified as 053316. ZPMC QC is identified as Mr. Xu Jie.

The welding variables recorded by QC appeared to comply with WPS-B-T-2331-Tc-P4-F.

During random in-process verification of strut angle connection plate, this Quality Assurance (QA) inspector discovered the following issues:

- ZPMC personnel were performing base metal repair by Shielded Metal Arc Welding (SMAW) process on the base metal of strut angle connection plate as per Welding Repair Report (WRR) T-WR3217, Rev. 0.
- Weld Repair Report (WRR) cites WPS-485-SMAW-1G(1F)-FCM-REPAIR as applicable.
- This repair welding has been performed as per WPS-485-SMAW-1G(1F)-REPAIR.
- This repair area is measured to be approximately 157mm in width, 460mm in length and 6mm in deep.
- This base metal repair has been performed without prior approval of the engineer.
- The welder is identified as 040655.
- The member is identified as ED1-SA4-68-143M-5.
- The material is identified as Seismic Performance Critical Member (SPCM).
- The member is located in Bay 11.

This issue has an incident report. The attached photographs provide additional detail.

BAY 10

SKIRT BEAM RING

FCAW welding of weld joint 89 located on SSD1-SA623B/B.

Welder is identified as 057244. ZPMC QC is identified as Mr. Lu Wei Chao.

The welding variables recorded by QC appeared to comply with WPS-B-T-2133.

FCAW welding of weld joint 13 located on SSD1-SA623B/B.

Welder is identified as 057244. ZPMC QC is identified as Mr. Lu Wei Chao.

The welding variables recorded by QC appeared to comply with WPS-B-T-2333-Tc-P4-F.

TOWER FACADE PLATE

FCAW welding of weld joint 7 located on SD1-SFSA4-71.

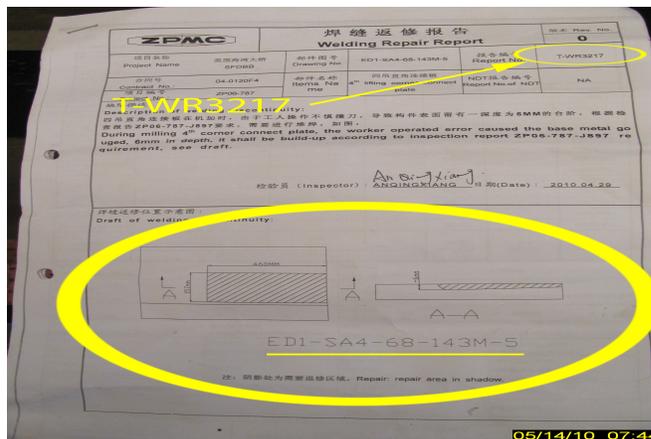
Welder is identified as 057266. ZPMC QC is identified as Mr. Zhu Zhong Jie.

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

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

WELDING INSPECTION REPORT

(Continued Page 3 of 3)



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 Skyler Guest : 15000422360, who represents the Office of Structural Materials for your project.

Inspected By: Gaikwad, Umesh

Quality Assurance Inspector

Reviewed By: Clifford, William

QA Reviewer