

**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-012577**Date Inspected:** 11-Mar-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 Xi.**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:** OBG**Summary of Items Observed:**

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

Bay 1:

This QA Inspector observed the following work in progress:

Flux Cored Arc Welding (FCAW) of OBG component – Traveler Rail; weld joint 20TR1-024 – 001. Welder is identified as 219188. ZPMC Quality Control (QC) is identified as Yang Fu Zhi. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2231-TC-U5-F.

Bay 7:

This QA Inspector observed the following work in progress:

Repair welding of OBG component – Traveler Rail 10TR3-006 - 014. Welder is identified as 053742. Welding process is identified as FCAW. ZPMC Quality Control (QC) is identified as Xia Yong Zheng. The repair welding was carried out as per Welding Repair Report (WRR) report no: B-WR-10310 R-0 (UT report no: B787-UT-10796). The welding variables recorded by QC appeared to comply with the Applicable WPS:

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WPS-345-FCAW-2G (2F)-Repair.

Bay 8:

This QA Inspector observed the following work in progress:

Submerged Arc welding (SAW) of side panel for Cross Beam (CB) 17, weld joint CB3001F-017- 001 & 002. Welder is identified as 040831. ZPMC Quality Control (QC) is identified as Zhang Qiao. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2221-B-L2C-S2.

FCAW welding of side panel for Cross Beam (CB) 17, weld joint CB3001D-017- 001 & 002. Welders were identified as 054459 & 054460. ZPMC Quality Control (QC) is identified as Zhang Qiao. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2231-B-U2-F.

Trial Assly:

Notification No: 005313.

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector has generated MT report for this date. The member(s) are identified as OBG components. The weld designations reviewed are as follows:

For 6W+CB5+6E – Hold back Tag#1:

- FB020-001 – 015 to 018, 128.
- FB030-001 – 013 to 016.
- FB034-001 – 013 to 016.
- BP026-005 – 026, 027, 042 & 043.
- SSD27-PP39 – 161, 162, 165 to 168, 127, 128, 119 to 122, 093 to 098, 103, 104, 049 to 054, 023 to 028, 030 & 031.

This QA Inspector also observed ZPMC performing welding of weld nos: SSD27-PP39 – 003/004, 007/008, 035/036, 175/176 & 279/180. These welds, due to excessive root gap, were welded as CJP welds instead of PJP welds. This QA Inspector discussed this issue with ZPMC QC personnel identified as Mr. Testino. ZPMC QC agreed that a separate notification will be raised for these welds.

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

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remedial efforts please contact Eric Tsang; phone: 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Wadkar,Sailesh	Quality Assurance Inspector
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<b>Reviewed By:</b>	Hall,Steven	QA Reviewer
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