

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-021069**Date Inspected:** 12-Feb-2011**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:** Mr. Sha zhi**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:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu 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:

OBG Assembly Bay- 14.

This QA Inspector randomly observed the following work in progress:

Shielded Metal Arc Welding (SMAW) welding of weld joint identified as SEG3020BC-011. Welder is identified as 067949. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-P-2112-FCM-1.

SMAW welding of weld joint identified as SEG3020BC-013. Welder is identified as 066734. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-P-2112-FCM-1.

SMAW welding of weld joint identified as SEG3020U-588. Welder is identified as 067904. ZPMC Quality Control (QC) is identified as Mr. Wang xiang pin. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-P-2212-TC-U4b-FCM-1.

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SMAW welding of weld joint identified as DP3173-001-021. Welder is identified as 037779. American Bridge/Fluor (AB/F) QA is identified as Mr. Shen jian. The welding variables recorded by QA personnel observed appeared to comply with WPS: WPS-B-P-2212-TC-U4b-FCM-1.

Flux Cored Arc Welding (FCAW) welding of weld joint identified as SEG3015B-005. Welder is identified as 067888. ZPMC Quality Control (QC) is identified as Mr. Wang xiang pin. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-T-2232-ESAB.

FCAW welding of weld joint identified as DP3175-001-400~404. Welder is identified as 048433. American Bridge/Fluor (AB/F) QA is identified as Mr. Shen jian. The welding variables recorded by QA personnel observed appeared to comply with WPS: WPS-B-T-2133- ESAB.

During a random Visual inspection of OBG sub assembly and floor beam SA3177A and FB3184A components, this QA observed that the root opening of the fillet welds exceeded the maximum allowable tolerance. The affected welds are identified as SEG3013Y-322/323. The root opening as measured by this QA were approximately 7 mm. These joints have been previously welded. This QA marked the affected areas and informed ZPMC Quality Control (QC) Inspector identified as Mr. Wang Xiang Pin of this issue. Mr. Wang Xiang Bin informed this QA that the joints would be corrected in a manner compliant with the contract documents. This QA also informed the above issue to shop Lead QA inspector (verbally). Refer the attached photos for reference.

This QA Inspector did not generate an incident report for the above issue as per the shop lead QA inspector's instruction.

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



## Summary of Conversations:

No significant conversations were reported on this date.

## 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 Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Prabhu,Surendra	Quality Assurance Inspector
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<b>Reviewed By:</b>	Peterson,Art	QA Reviewer
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