

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-019413**Date Inspected:** 07-Jan-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. An Qing xiang**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:

Flux Cored Arc Welding (FCAW) welding of weld joint identified as SEG3020BB-073. Welder is identified as 066236. ZPMC Quality Control (QC) is identified as Mr. Zhulin. 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 SEG3020BB-046. Welder is identified as 066695. ZPMC Quality Control (QC) is identified as Mr. Zhulin. 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 SEG3020BB-064. 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-T-2232-ESAB.

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FCAW welding of weld joint identified as DP3172-001-219.220. Welder is identified as 204730. ZPMC Quality Control (QC) is identified as Mr. Li ming yang. The welding variables recorded by QC personnel observed appeared to comply with WPS:WPS-B-T-2133-ESAB.

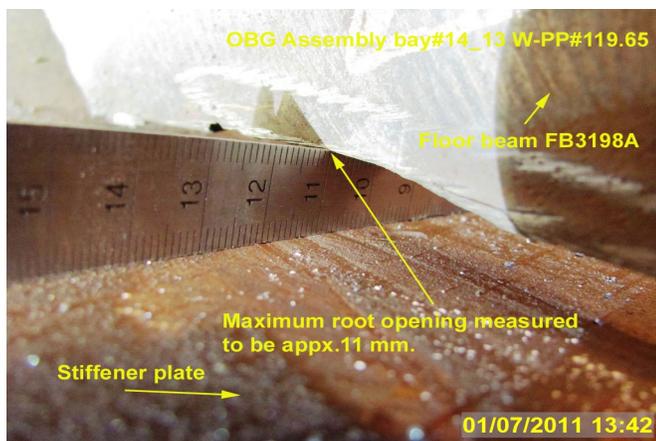
Shielded Metal Arc Welding (SMAW) Repair welding of weld joint identified as SEG3020Q-058. Welder is identified as 066038. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-345-SMAW-3G (3F)-FCM-Repair. The repair welding was being performed as per the Critical Welding Repair Report (CWR) No: B-CWR2620. This weld was previously rejected by ZPMC UT Technicians and recorded on UT report no.B787-UT-18520.

SMAW Repair welding of weld joint identified as SEG3014H-232. Welder is identified as 045196. ZPMC Quality Control (QC) is identified as Mr. Wang xiang pin. The welding variables recorded by QC personnel observed appeared to comply with the Applicable WPS: WPS-345-SMAW-2G (2F)-FCM-Repair. The repair welding was being performed as per the Welding Repair Report (WRR) No: B-WR18971.

SMAW welding of weld joint identified as SEG3013AA-087,088. Welder is identified as 066163. ZPMC Quality Control (QC) is identified as Mr. Liu fang. The welding variables recorded by QC personnel observed appeared to comply with WPS:WPS-B-P-2213-TC-U4b-FCM.

During random Visual Testing of OBG 13 West Edge plate and Floor beam at Panel Point 119.65(Cross beam side), this QA observed the root opening of the fillet welds is exceed the maximum allowable tolerance. The root opening as measured by this QA approximately 11 mm. These welds to be connected to the edge plate and floor beam identified as EP3020E and FB3198A respectively. The effected welds are identified as SEG3013E-284,285. This QA marked the affected area and measured and informed ZPMC Quality Control (QC) Certified Welding Inspector identified as Mr. An Qing xiang of this issue. Mr. An Qing xiang 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.

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



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**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
<b>Reviewed By:</b>	Peterson,Art	QA Reviewer

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