

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016801**Date Inspected:** 15-Sep-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

<b>CWI Name:</b>	Mr. Huang min / Mr. Chen xi	<b>CWI Present:</b>	Yes	No
<b>Inspected CWI report:</b>	Yes No N/A	<b>Rod Oven in Use:</b>	Yes	No N/A
<b>Electrode to specification:</b>	Yes No N/A	<b>Weld Procedures Followed:</b>	Yes	No N/A
<b>Qualified Welders:</b>	Yes No N/A	<b>Verified Joint Fit-up:</b>	Yes	No N/A
<b>Approved Drawings:</b>	Yes No N/A	<b>Approved WPS:</b>	Yes	No N/A
		<b>Delayed / Cancelled:</b>	Yes	No N/A
<b>Bridge No:</b>	34-0006	<b>Component:</b>	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:

BAY- 2

This QA Inspector Randomly observed the following work in progress:

Submerged Arc Welding of weld joint LD3048-001-005. Welder is identified as 207237. ZPMC Quality Control (QC) is identified as Mr. Zhu Jun. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2221-B-L2c-S-2.

Flux Cored Arc Welding (FCAW) of weld joint VP3014-001-019. Welder is identified as 207465. ZPMC Quality Control (QC) is identified as Mr. Zhu Jun. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2232-TC-U4b-F.

FCAW of weld joint VP3015-001-010. Welder is identified as 058245. ZPMC Quality Control (QC) is identified as Mr. Zhu Jun. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2232-TC-U4b-F.

BAY- 4

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FCAW of weld joint EP3027-001-034. Welder is identified as 217805. ZPMC Quality Control (QC) is identified as Mr. Shen jian guo. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

BAY- 6

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 06671.

Magnetic Particle Testing (MT)

This QA performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated MT report for this date. The members are identified as OBG Cross beam CB19 Deck and Bottom Plate weld Components. Total number of welds MT Tested: 30 No's. The weld designations are review as follows:

1. BP3097-2-001-001~006
2. BP3097-1-001-001~006
3. BP3099-2-001-001~006
4. DP3178-2-001-001~004
5. DP3182-1-001-001~004
6. BP3098-1-001-001~004

Signed off the following green tags:

1. 14700 ~14706
2. 14548.

Shielded Metal Arc Welding (SMAW) of weld joint WJF-0-074. Welder is identified as 049769. ZPMC Quality Control (QC) is identified as Mr. Huang min. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-3311-TC-P4.

SMAW of weld joint WJF-0-88. Welder is identified as 215083. ZPMC Quality Control (QC) is identified as Mr. Huang min. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-3311-TC-P4.

SMAW of weld joint WJF-0-083. Welder is identified as 057795. ZPMC Quality Control (QC) is identified as Mr. Huang min. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-3311-TC-P4.

BAY- 7

FCAW of weld joint SA3078-005-001. Welder is identified as 053609. ZPMC Quality Control (QC) is identified as Mr. Xu Hai Yang. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2333-C-P2-F.

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FCAW of weld joint W2-SB1-014-126~131. Welder is identified as 215089. ZPMC Quality Control (QC) is identified as Mr. Xu Hai Yang. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2132-3.

BAY- 8

During random in process inspection of OBG member identified as Bike path, this QA observed a cracked tack weld on weld joint identified as BK004A6-053-033. This QA marked the cracked tack and informed ZPMC Quality Control (QC) indentified as Mr. Liu Chuan gang of this issue. Mr. Liu Chuan gang informed this QA that the cracked tack would be corrected in a manner compliant with the contract documents. Refer the attached photos for reference.

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 Quality Control (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 Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Prabhu,Surendra

Quality Assurance Inspector

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**Reviewed By:** Hall,Steven

QA Reviewer