

**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-017206**Date Inspected:** 25-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. Tian Lei /Mr. Huang min	<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- 1**

This QA received ZPMC inspection notification sheet 06763 to perform dimensional inspection of traveler rail identified as 20TR1-025. Dimensional inspections performed this traveler rail include, but is not limited to, overall length, beam sweep, beam camber, flange tilt and flange warpage. The results of the inspection were recorded on Caltrans (CT) QA form OBG DCP Hand Measurements Survey: Traveler Rails and submitted to CT QA lead for review.

This QA Inspector Randomly observed the following work in progress:

Flux Cored Arc Welding (FCAW) of weld joint E2-SB1-007-126~131. Welder is identified as 216872. ZPMC Quality Control (QC) is identified as Mr. Xiang feng feng. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3

FCAW of weld joint E2-SB1-006-022,023. Welder is identified as 215082. ZPMC Quality Control (QC) is identified as Mr. Xiang feng feng. The welding variables appeared to comply with the Applicable WPS: WPS-B-

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T-2132-3.

BAY- 2

FCAW of weld joint FB3317-001-129. Welder is identified as 045209. 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 E5-SB1C-006-126~131. Welder is identified as 062708. ZPMC Quality Control (QC) is identified as Mr. Zhu Jun. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

FCAW of weld joint E5-SB1-055-126~131. Welder is identified as 045276. ZPMC Quality Control (QC) is identified as Mr. Zhu Jun. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

During random in process inspection of OBG member identified as FB3317A, this QA observed an arc strike on Piece Mark (PCMK) identified as X4841B. The nearest weld joint is identified as FB3317-001-054. This QA marked the affected area and informed ZPMC Quality Control (QC) identified as Mr. Zhu Jun of this issue. Mr. Zhu Jun informed this QA that the arc strike would be corrected in a manner compliant with the contract documents

BAY- 3

Submerged Arc Welding (SAW) of weld joint LD3040-001-007. Welder is identified as 050502. ZPMC Quality Control (QC) is identified as Mr. Zhan Hai feng. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2221-B-L2c-S-2.

BAY- 6

Shielded Metal Arc Welding (SMAW) of weld joint WJF-0-058. Welder is identified as 067609. 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-0-054. Welder is identified as 068764. 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-0-065. Welder is identified as 062092. 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- 8

FCAW of weld joint BK004A5-061-090. Welder is identified as 067947. ZPMC Quality Control (QC) is identified as Mr. Liu Chuan gang. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2231-B-U2-F.

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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