

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015928**Date Inspected:** 31-Jul-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:** Mr. Li Jia**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:

BAY- 2

This QA Inspector Randomly observed the following work in progress:

Flux Cored Arc Welding (FCAW) of weld joint FB3330-001-001. Welder is identified as 045203. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2231-B-U2-F.

Submerged Arc welding (SAW) of weld joint FB3319-001-003. Welder is identified as 045265. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2221-B-L2c-S-2.

BAY- 6

ZPMC personnel heat straightening OBG member identified as DP3115A. Distortion appeared to be caused by welding of the material. ZPMC Quality Control (QC) inspector identified as Mr. Xia Yong Zheng was present to

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monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) HSR1 (B) 8903.

FCAW of weld joint TR6C-PP074-006. Welder is identified as 204342. ZPMC Quality Control (QC) is identified as Mr. Shen Jian Guo. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2233-TC-U4c-F.

ZPMC MT Technicians are performing Magnetic Particle Testing for the welds located on Deck Panel DP3127-001.

During random in process inspection of OBG Traveler Rail bracket weld joint is identified as TR5D-PP075-008, this QA observed the gap between steel backing and the base metal at the weld root approximately 9 mm after fit up the weld joint. This QA marked the affected area and informed ZPMC Quality Control (QC) identified as Mr. Shen Jian Guo and American Bridge/Fluor (AB/F) QA Inspector Mr. Lui Lai Quan of this issue. Mr. Shen Jian Guo and Mr. Lui Lai Quan informed this QA that the gap would be corrected in a manner compliant with the contract documents prior to start the welding. Refer the attached photos for further information.

BAY- 7

FCAW of weld joint SP3038-001-007,008. Welder is identified as 204342. ZPMC Quality Control (QC) is identified as Mr. Guopan. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

FCAW of weld joint SP3038-001-011,012. Welder is identified as 053609. ZPMC Quality Control (QC) is identified as Mr. Guopan. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

Shielded Metal Arc Welding (SMAW) Tack welding of weld joint SP3118C-001-040,041. Welder is identified as 049771. ZPMC Quality Control (QC) is identified as Mr. Wang Liang. The welding variables appeared to comply with the Applicable WPS: WPS-B-P-2112.

SMAW Tack welding of weld joint SP3129-001-044,045. Welder is identified as 049485. ZPMC Quality Control (QC) is identified as Mr. Wang Liang. The welding variables appeared to comply with the Applicable WPS: WPS-B- P-2112.

SAW of weld joint SP3121A-001-001. Welder is identified as 053748. ZPMC Quality Control (QC) is identified as Mr. Guopan. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2221-B-L2c-S-2.

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

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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.

Inspected By: Prabhu,Surendra

Quality Assurance Inspector

Reviewed By: Hall,Steven

QA Reviewer