

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-018387**Date Inspected:** 24-Nov-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. Chen xi**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) Repair welding of weld joint FB3343-001-315. Welder is identified as 066236. ZPMC Quality Control (QC) is identified as Mr. Yuan hai gang. The welding variables appeared to comply with the Applicable WPS: WPS-345-FCAW-2G (2F)-Repair. The repair welding was being performed as per the Welding Repair Report (WRR) No: B-WR17386. This weld was rejected by ZPMC UT Technicians and recorded on UT report No: B787-UT-17521. Refer the attached photos for reference.

FCAW of weld joint SA3416-001-008,009. 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.

FCAW of weld joint SA3416-001-014,015. 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-2132-3.

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FCAW of weld joint SA3416-001-028,029. Welder is identified as 045203. 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 the QA random visual inspection of OBG Longitudinal diaphragm Lifting lugs (LD) of Lift 14 West, this QA observed ZPMC has temporarily tack welded steel plates on Seismic Performance Critical Material (SPCM) plate without engineer's approval. The approved shop drawings do not specify any welds in these locations. Additionally, SPCM tack welds did not appear to comply with the minimum tack weld length requirement of AWS D1.5 2002. The length of some tack welds, as measured by this QA, was approximately 27mm to 60 mm in length. The LD is identified as LD3048A. The LD lifting lug part numbers are identified as X4913A/X4916A (SPCM-TTP-Z), X8534G/H (SPCM), X4997D/F (SPCM). The material type of the added steel plates being welded to the LD is not known. The thickness of the LD web plates is 35mm and 18mm and lifting lugs is 40mm.

This QA Inspector generated an incident report on this date for the above issue, for further information see the incident report.

BAY- 3

FCAW of weld joint LD3040-001-036. Welder is identified as 055564. ZPMC Quality Control (QC) is identified as Mr. Zhang yaxu. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2233-TC-U4b-F.

FCAW of weld joint FB3286-001-070. Welder is identified as 068501. ZPMC Quality Control (QC) is identified as Mr. Zhu jun. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2333-TC-P4-F.

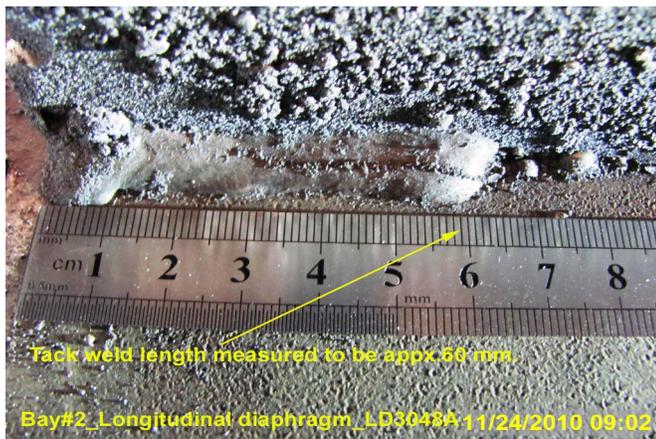
FCAW of weld joint FB3286-001-042. Welder is identified as 044830. ZPMC Quality Control (QC) is identified as Mr. Zhu jun. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2333-TC-P4-F.

This QA Inspector performed photo documentation on Lift 14 Hinge plates are identified as FB3286A, FB3273A, FB3272A, FB3328B, FB3327A, FB3343A, SA3325A, SA3324A, SA3409A and SA3410A located in sub assembly bay 2 and 3. These photos has been sent to QA lead Inspector and Structural Material Representative (SMR) by mail.

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.

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Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer
