

**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-018425**Date Inspected:** 30-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:** Li Yang**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:** OBG Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. M. Manikandan was present during the time noted above for observations relative to the work being performed.

**OBG # TRIAL ASSEMBLY YARD (11EE)**

During random in process visual inspection of OBG Segment 11EE, this Caltrans Quality Assurance (QA) Inspector observed ZPMC personnel performing back gouging in inclement weather (rain) which exposed the weld to wet conditions.

The location was at the exterior side of complete joint penetration groove weld joining bottom panel and side panel at work point E3 (Bike path side) of segment 11EE.

The weld joint identified as SEG074A-012.

This weld is located between Panel Point (PP) 108 and PP 109.

Segment 11EE is located in the Trial Assembly area.

An incident report was generated for the above issue identified in 11EE. See TL-6025 generated on this date for detailed information.

For additional information please reference the pictures below:

**OBG # TRIAL ASSEMBLY YARD (Lift 11E)**

The QA inspector observed the heat straightening operation on traveler rail brackets. The location was the flange fillet weld of traveler rail bracket of Lift 11E. The heat straightening was performed against heat straightening

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## WELDING INSPECTION REPORT

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report HSR1 (B)-9903 Rev.0 dated 28th Nov. 2010. The heat straightening operation appeared to be in general compliance with the contract specifications. The weld designations reviewed are as follows:

TR1A-PP95-002

TR1A-PP97-002

TR1A-PP99-002

TR1A-PP101-002

TR1A-PP103-002

TR1A-PP105-002

TR1A-PP107-002

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD (12AE)

The QA Inspector observed the welding operation per the FCAW process on weld joint no. 015 in the (1G) flat position on side and bottom panel piece mark no. SEG3001A. The location was the complete joint penetration groove weld joining side and bottom panel of segment 12AE at work point E4. The welder ID was 047353. The welding variables recorded by QC appeared to comply with the WPS-B-T-2231-ESAB.

OBG # TRIAL ASSEMBLY YARD (11EE)

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 006 in the (4G) overhead position on cornerassembly piece mark no. CA093-006. The location was the complete joint penetration groove weld joining edge and deck panel of segment 11EE at work point E4. The welder ID was 040320. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-Tc-U4b-FCM-1.

OBG # TRIAL ASSEMBLY YARD (12AE)

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 001 in the (4G) overhead position on cornerassembly piece mark no. SEG3001AA. The location was the complete joint penetration groove weld joining edge and deck panel of segment 12AE at work point E4. The welder ID was 040320. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-Tc-U4b-FCM-1.

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 relevant 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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**Inspected By:** Manikandan, Murugan

Quality Assurance Inspector

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**Reviewed By:** Peterson, Art

QA Reviewer