

**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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002009**Date Inspected:** 22-Apr-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 2300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island**CWI Name:** Li Yan Hua**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**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to perform Visual Testing (VT) of the Orthotropic Box Girder (OBG) components, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

The Caltrans QA Inspector performed visual inspection of OBG 16.365 meter deck panel DP042-001 (welds 004, 005 and 006) and 14.960 meter DP003-001 (welds 007, 008 and 009) U-rib Partial Joint Penetration (PJP) welds. Visual testing of welding was performed in accordance with contract documents. The following discontinuities were found during inspection on the Submerged Arc Welding (SAW) cover pass, incomplete fusion, overlap, undercut, underfill and oversize welds. Welding discontinuities were marked on deck panel with a permanent marker, length and Y location recorded. Visual Inspection results were distributed to the appropriate personnel for review. A summary of discontinuities on inspected U- rib PJP welds are listed below.

DP486-001

DP486-001-001, Incomplete Fusion 5 areas, Overlap 1 area, Oversize 5 areas, and Underfill 10 areas.

DP486-001-002, Overlap 5 areas, and Underfill 1 area.

DP486-001-003, Overlap 5 areas, Underfill 18 areas, and Incomplete fusion 7 areas.

DP486-001-004, Overlap 4 areas, and Underfill 17 areas.

DP486-001-005, Overlap 8 areas, Underfill 7 areas, and Oversize 7 areas.

DP486-001-006, Overlap 4 areas, Underfill 15 areas, Incomplete fusion 10 areas, and Oversize 2 areas.

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# WELDING INSPECTION REPORT

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The Caltrans QA Inspector observed ZPMC welder Zhao Chengshuang performing Flux Cored Arc welding of U-rib splice welds DP084-001-118 and DP138-001-194. The welding appeared to be in conformance with the posted welding procedure specification, WPS-B-T-2233-B-U2-F.



### Summary of Conversations:

No relevant conversations occurred 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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Viars,Larry	Quality Assurance Inspector
<b>Reviewed By:</b>	Cuellar,Robert	QA Reviewer

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