

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-000756**Date Inspected:** 02-Nov-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island**CWI Name:** Arthur Peterson**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 Closed Rib Trial**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to perform welding inspection of Orthotropic Box Girder (OBG) Mock-up closed rib trial, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Caltrans QA Inspector Viars and QA Inspector Hasler performed random visual observations of the cover pass welds on the OBG closed rib weld trial. ZPMC Quality Control (QC) personnel performed 100% visual inspection prior to Caltrans random observation. American Bridge Flour (ABF) performed random observations of the cover pass prior to Caltrans observations. The following welding anomalies were noted during the random visual inspection, undercut that exceeded 0.25 mm, excessive reinforcement at start stop areas, overlap, undersized weld and areas of incomplete fusion. The following picture below on the right shows an area of overlap on the closed rib weld. The areas mentioned above were marked on the deck plate adjacent to area of interest. Mapping and locations were recorded by Caltrans swing shift personnel.

Caltrans QA Inspector Viars observed areas of complete joint penetration at the ends of the ribs. These areas were uniform and appeared to have minimal inside penetration. The visual observations on the inside of the rib was limited due accessibility.

Caltrans QA Inspector Viars performed random visual observations of the closed rib weld trial cover pass on welds # 6 thru # 10. Welding did not appear to meet AWS D1.5 requirements.

WELDING INSPECTION REPORT

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Summary of Conversations:

As identified within the contents of this report.

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.

Inspected By:	Viars,Larry	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer
