

**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-001348**Date Inspected:** 25-Jan-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 600**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:** Huwei Qing**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 observations and monitor welding operations of the Orthotropic Box Girder (OBG), for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Caltrans QA Inspector Viars performed random visual inspection of OBG Side plate 038 fillet welds. Welding was performed with a semi automated gantry machine with the Flux Cored Arc Welding (FCAW) process. ZPMC QC Mr. Huwei Qing monitored welding operations. During visual observations areas of piping porosity, overlap and lack of fusion on the stiffener toe of the weld were noted on the root pass of SP038 fillet welds. Mr. Huwei stated areas of nonconformance would be excavated and repaired prior to the cover pass of the root pass. Please see the attached photo of piping porosity found on weld joint # SP038-01-020 below.

Caltrans QA Viars observed ZPMC personnel heat straightening Bottom Plate BP04. Heat straightening appeared to be in conformance with the AWS D1.5 (2002) and the contract requirements

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# 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.

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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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