

**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-004356**Date Inspected:** 07-Oct-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sun Wei**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:** Tower**Summary of Items Observed:**

The Quality Assurance (QA) Inspector Gregory Bertlesman arrived on site at the Zhenhua Port Machinery Company facility on Changxing island, China to periodically monitor welding and Quality Control functions. While on site the Quality Assurance Inspector observed and/or discovered the following.

**East Shaft Lift 1**

The Quality Assurance Inspector observed ZPMC continuing to tack weld several diaphragm plates to skin A and B, utilizing the shielded metal arc welding process.

**South Shaft Lift 1**

The Quality Assurance Inspector observed ZPMC fitting up and tack welding the 9M, 23M, 28M and 43M Diaphragm Plate assemblies on to the South Shaft, Skin A, assembly. Three ZPMC welders were utilizing the shielded metal arc welding process to produce the tack welds. Below is a digital photograph illustrating the erection in progress of the 33M diaphragm plate.

**Visual and Magnetic Particle Verification**

The Quality Assurance Inspector performed visual and magnetic particle verification to 38M and 15M diaphragm plates. The Quality Assurance Inspector marked several welds that were undersized. ZPMC measured behind the Quality Assurance Inspector and agreed. The welds were immediately repaired by the flux cored arc welding process. See Caltrans TL-6028 magnetic particle report for further information.

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# WELDING INSPECTION REPORT

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## Summary of Conversations:

As stated in the contents of the above 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 Joshua Ishibashi 137.6471.0411 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Bertlesman,Greg	Quality Assurance Inspector
<b>Reviewed By:</b>	Wright,Mark	QA Reviewer

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