

**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-006530**Date Inspected:** 19-Apr-2009**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:** ZPMC and ABF**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:** SAS tower**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance(QA) Inspector, Wai Pau, was present during the times noted above for observations relative to the work being performed.

**Bay #10 South and North Tower Shop**

South Tower lift #2:- ZPMC sent a notification request for green tag inspection today. The notification required MT and VT on fit lugs and interior diaphragms for skin plate C of south tower lift #2. Caltrans QAI Mr. Wai Pau confirmed to ZPMC CWI Mr. Liu Yang by phone and arrived to south tower and talked to ABF CWI Mr. Yang Yi Yeng. Both informed Caltrans QAI that fit lugs and interior diaphragms have been accepted by ZPMC and ABF. However, Caltrans QAI Mr. Charlie Franco found a lot of slag in voids in the wrap around welds in numerous rat holes of diaphragms. Caltrans QAI Charlie and Wai have discussed with ZPMC CWI Mr. Liu and ABF CWI Mr. Yang on the floor regarding this rat holes issue. During discussion (Chinese and English language) ABF CWI Mr. Yang is not clear in informing ZPMC and Caltrans as to what inspection locations he has accepted on skin plate C. ZPMC Mr. Liu then cancelled this green tag inspection.

North Tower Lift #3:- Caltrans QA inspector performed final dry MT inspection on four CJP stiffener welds of north tower lift #3. The CJP stiffener welds for MT inspection have been accepted by ZPMC prior Caltrans QA inspection. Base on Caltrans inspection, the four CJP stiffener welds appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

**Bay #11 East and West Tower Shop**

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# WELDING INSPECTION REPORT

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West Tower Lift #2:-Caltrans QA Inspector observed five ZPMC workers performed grinding process on the fig lug welds and diaphragm welds. The fig lug welds and diaphragm welds are located at elevation 53m to 80.75m interior diaphragm of skin C. The grinding processes are removing and repair the fillet welds that have been rejected by ZPMC VT inspection. Base on Caltrans observation, no discrepancies were noted.

East Tower Lift #1:-Caltrans QA Inspector observed five ZPMC workers and two welders performed grinding and FCAW repair welding process on the fig lug welds and diaphragm welds. The fig lug welds and diaphragm welds are located at elevation 9m to 47.6m interior diaphragm of skin C. The grinding and welding process are removing and repair the fillet welds that have been rejected by ZPMC VT inspection. Base on Caltrans observation, no discrepancies were noted.

East Tower Lift #1:-Caltrans QA Inspector performed QA UT test on the six spots of corner longitudinal seam weld. Each QA UT test spot has one meter weld length. The QA UT test purpose is for prior install triangle plate. Base on Caltrans UT inspection, the six spots corner longitudinal seam weld appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

East Tower Base Share Plate Stiffener: - Caltrans QA Inspector performed QA UT test on the two CJP stiffeners of east tower base share plate. Base on Caltrans UT inspection, the CJP stiffener welds appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### **Summary of Conversations:**

As noted within the report above.

### **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 Serge Sinevod 13482570045, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Pau,Wai	Quality Assurance Inspector
<b>Reviewed By:</b>	Clifford,William	QA Reviewer

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