

**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-009672**Date Inspected:** 23-Aug-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 Mr. Wai Pau, was present during the times noted above for observations relative to the work being performed.

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

East Tower Lift #3:- Caltrans QA Inspector observed six welders performed FCAW welding process on the corner cover plates that connected skin plate D and E. The corner cover plates are located at elevation 89m, 99m and 109m double diaphragm section. The FCAW welding were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA inspector observations, no discrepancies were noted.

East Tower Lift #3:- Caltrans QA Inspector observed four ZPMC grinders in process of grinding and FCAW repair welding on fit lugs of interior diaphragms. The fit lugs located at the elevation 85.25m to 111.67m diaphragm sections that connected skin plate D of east tower lift #3. The grinding and FCAW repair welding process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

West Tower Lift #3:- Caltrans QA Inspector observed two welders performed FCAW repair process on inner corner longitudinal seam weld that connected skin plate A to E. The FCAW repair welding located at elevation 89m and 95.5m diaphragm section. The FCAW repair welding was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA inspector observations, no discrepancies were noted.

West Tower Lift #3:- Caltrans QA Inspector observed two welders performed FCAW repair process on outer

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corner longitudinal seam weld that connected skin plate D to E. The FCAW repair welding located at elevation 102.5m and 109m and diaphragm section. The FCAW repair welding was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA inspector observations, no discrepancies were noted.

### Outside Milling Area

West Tower Lift #1:- Caltrans QA Inspector observed ZPMC six welders performed FCAW build up weld metal welding for weld joint bevel on stiffeners which located at exterior bottom tower of skin plate A, B, C, D and E. The metal buildup is from 1mm to 20mm thick. The FCAW welding was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

West Tower Lift #1 and 2: - Caltrans QA Inspector observed ZPMC fifteen grinders performed grinding process on the inner metal surfaces. The purpose of grinding is removed all the scale, weld files prior inner surface final inspection. The grinding process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

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

### Summary of Conversations:

As notes within 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 Sinoved 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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