

**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-012044**Date Inspected:** 12-Jan-2010**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**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:** 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**

West tower lift #4:- Caltrans QA Inspector observed seven ZPMC welders in process fit up and SMAW process on seven triangle cover plates that connected to diaphragm and skin plate C and D of west tower lift #4. The seven triangle cover plates located at elevation 114m ~143m. The SMAW welding was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA inspector observations, no discrepancies were noted.

West tower lift #4:- Caltrans QA Inspector observed five ZPMC workers performed grinding process on the fillet weld of fig lugs. The fig lugs are located at elevation 114m~143m interior diaphragm of west tower lift #4. The grinding process is removing the weld profiles that have been rejected by VT inspection. Base on Caltrans observation, no discrepancies were noted.

West tower lift #3:- Caltrans QA Inspector observed six ZPMC workers performed drilling process on exterior double plates of the skin plate A for west tower lift #3. The exterior double plates are located at tower strut connection areas. The holes template has been installed and secured by hold devices, the alignment of holes template has accepted by ZPMC and ABF prior drilling hole. Based on Caltrans QA inspector observations, no discrepancies were noted.

Tower strut connection plate: - Caltrans QA Inspector observed a ZPMC welding operator performed SAW process on CJP weld of tower strut connection plate for tower elevation 123m. . The CJP weld and plate ID are ED1-STSA4-6-123M-1-8B, ED1-STSA4-6-123M-2-8B and ND1-STSA4-6-123M-1-8B. The SAW welding was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA inspector observations, no discrepancies were noted.

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## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

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Tower strut: - Caltrans QA Inspector performed QA final VT and dry MT testing on the CJP welds and fillet welds of tower strut. The ZPMC inspection request number is 05012 .The strut welds ID are ED1-A6003-5. All the CJP and fillet welds have been accepted by ZPMC and ABF prior Caltrans QA inspection. Base on Caltrans VT and MT testing, the CJP welds and fillet welds appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract documents. A green tag # 11688 has been signed on this tower strut by ABF after Caltrans completed the testing.

West tower lift #4:- Caltrans QA Inspector observed a welder performed FCAW process on exterior corner longitudinal seam weld that connected skin plate B to C. The weld number is WSTLL4-2B/L-58. The welding located at elevation between ASTM 345 material connects to ASTM 485 with 200 mm length. The minimum preheat and maximum interpass temperature requirements for FCAW longitudinal seam weld are 180C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

### CLOSING STATEMENT

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 Skyler Guest 15000422360 , 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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