

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-002006**Date Inspected:** 16-Apr-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 2300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** An Qing Xiang**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:**

Caltrans Quality Assurance (QA) Inspector, Mike Hasler was present to observe the fitup, welding and related activities associated with the fabricating of Caltrans Mock-up, 77M, 89M, 114M, Orthotropic Box Girders (OBG) and Tower, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Item Description	WBS	Dwg No.	Status
1 Tower Skin Plate New Tower Shop Bay 2: ZPMC performed submerged arc welding (SAW), tower skin plate splice weld, joining plate P456-1 (E) to P375 (E) plate. The welder operator is identified as Mr. Xu Yian utilizing welding procedure WPS-B-T-2221-B-U3c-S; weld joint ESD1-SA107 A/J- 18B. Caltrans QA measured current welding parameters at approximately 665 amps, 34.0 volts and 630mm/min (millimeters per minute) travel speed. Caltrans QA verified preheat and interpass temperatures during the welding activities. The preheat temperature prior to the start of welding measures more than 110 degrees Celsius but less than 230 degrees Celsius during maximum interpass temperature verification. Caltrans QA Inspector observed ABF Inspectors, Mr. Li Han jie monitoring welding activities at the work station.	NA	NA	Welding
2 Tower Skin Plate New Tower Shop Bay 1: ZPMC performing flame heat straightening operations on tower skin plate for mill induced distortion. The tower skin plate and heat straightening procedure are identified as skin plate P837, procedure HSR1 (T)-720, revision (0). Caltrans QA observed ZPMC heating the plate manually with a rose-bud torch. Caltrans QA observed ZPMC Quality Control Inspector, Mr. Lui Dao feng monitoring the heat straightening of the plate using a calibrated infra-red temperature indicating device to monitor the heat. The following digital picture illustrates heat straightening in progress.	NA	NA	Heat Straightening

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Reviewed By: Cuellar,Robert

QA Reviewer