

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-005823**Date Inspected:** 17-Mar-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1630**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**Location:****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:**

Bay #10 South and North Tower Shop

South Tower Lift #2:- Caltrans QA inspector observed four ZPMC welding operators performed semi-automatic SAW on outer corner longitudinal seam weld # SSD1-TL5B/L-2A and SSD1-TL5 B/L-3A which connected skin plate A to B skin plate and B to C skin plate of east tower lift #2. The weld designed is a double -V-groove with welding conducted in the in flat position (1G). The minimum preheat and maximum interpass temperature requirements for SAW longitudinal seam weld are 110C degree and 230 C degree. The semi-automatic SAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

South Tower Lift #2:- Caltrans QA inspector observed six workers performed grinding process on the fillet welds of fit lugs. The fit lugs are attached to interior diaphragm and stiffeners. The fit lugs located at 23m, 28m 33m and 38m have been in processed at this time. The grinding purpose is removing the weld profile on the fillet weld prior NDT testing. Based on Caltrans QAI observations, no discrepancies were noted.

Bay #11 East and West Tower Shop

West Tower Lift #2:- Caltrans QA Inspector observed six ZPMC welders in process fit up and SMAW tack welding on skin plate B of west tower lift 2. A numerous temporary tack welds have been welded attach to the skin plate B and skin plate A after the skin plate B has been secured. Base on Caltrans observation, no discrepancies were noted.

East Tower Lift #2:- Caltrans QA inspector observed two ZPMC welding operators performed semi-automatic SAW on outer corner longitudinal seam weld # ESD1-TL7B/L-3A which connected skin plate C and skin plate D of east tower lift #2. The weld designed is a double -V-groove with welding conducted in the in flat position (1G).

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The minimum preheat and maximum interpass temperature requirements for SAW longitudinal seam weld are 110C degree and 230 C degree. The semi-automatic SAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

East Tower Lift #1:- Caltrans QA Inspector observed two ZPMC welders in process of FCAW repair welding on the longitudinal seam weld between inner corner skin plate A and skin plate E. The repair weld areas located at elevation 15m to 18m interior diaphragm and the repair weld number is ESD1-A165C/J-264 A/B. The repair weld areas has been grinded and per heat to 160C degree prior FCAW welding. Base on Caltrans observation, no discrepancies were noted.

East Tower Lift #1:- Caltrans QA Inspector observed two ZPMC welders performed FCAW fillet weld process on the fit lugs. The fit lugs are located at elevation 28m interior diaphragm of skin plate C. The fillet weld areas have been per heat to 110C degree prior FCAW welding. Total four fit lugs number C1, C2 and C4 have been completed day shift. Base on Caltrans observation, no discrepancies were noted.

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 , who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer
