

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-011149**Date Inspected:** 31-Dec-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**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#10

South tower lift#4:- Caltrans QA Inspector observed six welders performed FCAW process on CJP weld for corner diagonal stiffener that connected skin plate C to D of south tower lift #4. The welding located at elevation 114m to 146.28m. The minimum preheat and maximum interpass temperature requirements for FCAW CJP weld are 110C 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.

North Tower Lift #4:- Caltrans QA inspector observed a ZPMC welder performed SMAW on outer corner longitudinal seam weld that connected skin plate A and skin plate E of north tower lift #4. The weld designed is a double -V-groove with welding conducted in the in flat position (1G). The CJP welding located between ASTM 345 material and 485 material connecting zones which can't use semi-automatic SAW welding. The minimum preheat and maximum interpass temperature requirements for SMAW longitudinal seam weld are 110C degree and 230 C degree. The SMAW process was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

North Tower Lift #4:- Caltrans QA Inspector observed six ZPMC workers performed grinding process on the fig lug welds and diaphragm welds. The fig lug welds and diaphragm welds are located at elevation 114m to 146.28m interior diaphragm of skin B and C. The grinding process is removing the weld profiles that have been rejected by

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VT inspection. Base on Caltrans observation, no discrepancies were noted.

Tower strut plate: - Caltrans QA inspector performed final QA VT and dry MT testing on CJP and fillet welds of strut plate. The ZPMC inspection request number is 004970. The strut plates and weld ID is SSD1-A683 B/B 1 (2, 3, 4, 5, 6, 7) 1~8, 20~31, 33. The CJP and fillet welds for dry MT testing have been accepted by ZPMC prior Caltrans QA inspection. Base on Caltrans MT inspection, the welds appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

South tower lift #4:- Caltrans QA inspector performed final QA VT on the corner diagonal stiffener welds that connected skin plate B to C of south tower lift #4. The diagonal stiffener welds ID are SSSL4-1H/L-59/118/120, SSSL4-1I/L-59/69/121/123, SSSL4-1J/L-57/61/119/123 and SSSL4-1K/L-56/62/119/123. The corner diagonal stiffener welds for VT testing have been accepted by ZPMC prior Caltrans QA inspection. Base on Caltrans VT inspection, the 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 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 Sinevod 13482570045 , who represents the Office of Structural Materials for your project.

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