

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-005861**Date Inspected:** 28-Mar-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1830**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:**

Bay #10 South and North Tower Shop

South tower lift #1:- Caltrans QA inspector performed final VT inspection on the fillet welds of corner diagonal stiffener. The fillet weld connected to back side of corner diagonal stiffener and skin plate C and D. The corner diagonal stiffener located at elevation 9m, 13m, 15m, 18m, 23m, 28m, 33, 38, 43 and 47.6m. All the fillet welds for VT inspection have been accepted by ZPMC and ABF QC prior Caltrans QA inspection. Base on Caltrans inspection, the fillet welds on stiffener to skin plates appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

South Tower Lift #2:- Caltrans QA Inspector observed five ZPMC workers performed grinding process on the fillet weld of fig lugs. The fig lugs are located at elevation 59m, 68m and 71m interior diaphragm of south tower lift #2. The grinding process is removing the weld profiles that have been rejected by VT inspection. Base on Caltrans observation, no discrepancies were noted.

North tower lift #1:- Caltrans QA Inspector observed two welders performed SMAW process on inner corner longitudinal seam weld that connected skin plate C to D and skin plate D to E. The weld number is NDS1-A112B/H-2A and NSD1-A112B/H-1B. The welding located at elevation 13m to 15m. The minimum preheat and maximum interpass temperature requirements for SMAW longitudinal seam weld are 110C degree and 230 C degree. The SMAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

North tower lift #2:- Caltrans QA inspector performed final VT inspection on the stiffener welds of skin plate D for north tower lift #2. Total five of stiffener welds have been inspected and accepted by Caltrans QA inspector. Based on Caltrans QAI observations, no discrepancies were noted.

North Tower Lift #2:- Caltrans QA Inspector observed six ZPMC workers and welders in process fit up and

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SMAW tack welding on skin plate E of north tower lift 2. A numerous temporary tack welds have been welded attach to the skin plate E and skin plate A after the skin plate E has been secured. Base on Caltrans observation, no discrepancies were noted.

Bay #11 East and West Tower Shop

West tower lift#1:- Caltrans QA Inspector observed three welders performed FCAW process on inner corner longitudinal seam weld that connected skin plate A to B, B to C and A to E. The welding located at elevation 13m, 23m and 38m. The minimum preheat and maximum interpass temperature requirements for SMAW longitudinal seam 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.

East tower lift #2:- Caltrans QA inspector performed final VT inspection on the fit lug and diaphragm welds of skin plate B and C for east tower lift #2. The fit lug and diaphragm located at elevation 77m Base on Caltrans inspection, the fit lug and diaphragm welds appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.



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
