

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-009675**Date Inspected:** 03-Sep-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, 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:**

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 East and West Tower Shop

West Tower Lift #3:- Caltrans QA Inspector observed there welders performed FCAW repair process on inner corner longitudinal seam weld that connected skin plate C to D of west tower lift #3. The FCAW repair welding located at elevation 82.5m and 105.5m diaphragm section. The FCAW repair welding was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA inspector observations, no discrepancies were noted.

West Tower Lift #3:- Caltrans QA Inspector observed five ZPMC grinders in process of grinding and FCAW repair welding on fit lugs of interior diaphragms. The fit lugs located at the elevation 85.25m to 111.67m diaphragm sections that connected skin plate D of west tower lift #3. The grinding and FCAW repair welding process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

East tower lift 3:- Caltrans QA inspector performed final VT and dry MT inspection on triangle plates. The triangle plates are connected diagonal stiffeners to skin plate B and C corner. The weld ID and location are ESTL3-4B/K-62/63(85.25m), ESTL3-4C/K-99/100 (89m), ESTL3-4C/K-70/71 (89m), ESTL3-4F/K-57/58 (92.5m), ESTL3-4F/K-133-134(95.5m), ESTL3-4G/K-69/70(99m), ESTL3-4G/K-158/160(99m), ESTL3-4H/K-57/58(102.5m), ESTL3-4H/K-131/132(105.5m), ESTL3-4I/K-66/67(109m), ESTL3-4I/K-156/158(109m), ESTL3-4J/K-60/61(111.89m). The welds for VT and MT inspection have been

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accepted by ZPMC prior Caltrans QA inspection Base on Caltrans inspection, the welds appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

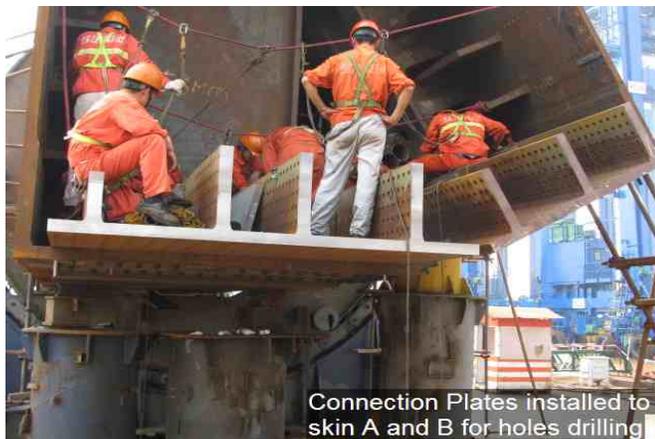
East tower lift 3:- Caltrans QA inspector observed five ZPMC welders installed corner diagonal stiffeners on the skin plates C to D. The locations for installing corner diagonal stiffeners are from 82.25m to 111.67m. The SMAW tack welding has been applied on the corner diagonal stiffener joints after the fit up accepted by ZPMC and ABF QC. Based on Caltrans QAI observations, no discrepancies were noted.

Tower Assemble Yard

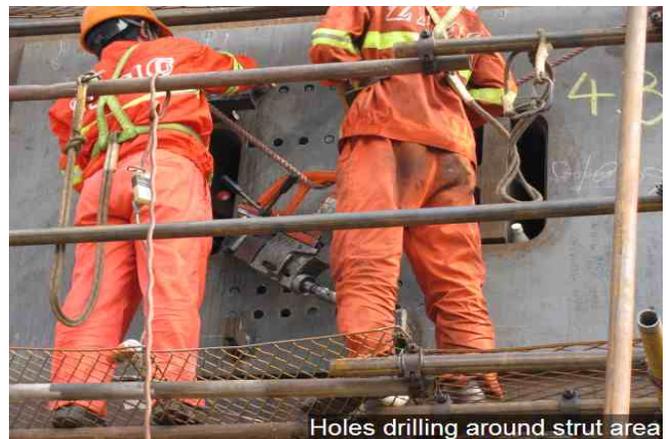
East Tower Lift #2:- Caltrans QA Inspector observed five ZPMC workers installed two connection plates which connect to skin plate B and C for holes drilling. The connection plates have been secured by few bolts and clamps prior drilling. The holes drilling process was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

East Tower Lift #1:- Caltrans QA Inspector observed four ZPMC workers performed drilling process on two strut connection areas for the skin plate C of east tower lift #1. The holes template has been removed after holes has been marked and secured. The holes drilling process was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Connection Plates installed to skin A and B for holes drilling



Holes drilling around strut area

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 Sinoved 13482570045, who represents the Office of Structural Materials for your project.

Inspected By: Pau,Wai

Quality Assurance Inspector

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Reviewed By: Clifford, William

QA Reviewer