

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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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-004006**Date Inspected:** 27-Aug-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Jeff Chen, CK Chan**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 Office of Structure Materials (OSM) Quality Assurance Inspector (QA) Raymond Lara was present at jobsite in Zhenhua Port Machinery Company facility on Changxing Island, China for the purpose of observing and monitoring the fabrication of the Tower.

Bay 1

The Quality Assurance Inspector observed ZPMC utilizing a milling machine in the beveling process on skin plate P350.

Skin Plate C South Tower

The Quality Assurance Inspector observed ZPMC personnel in process of performing fit operations on longitudinal stiffener plates to skin plate C South Tower Assembly.

The Quality Assurance Inspector observed ZPMC Caltrans approved welders 057090 and 0507286 utilizing the shielded metal arc welding process (SMAW). Welding tack welds joining longitudinal stiffeners to skin plate C South Tower Assembly. The Quality Assurance Inspector observed ZPMC Quality Control Personnel record parameters and verify preheat temperatures. The welding parameters observed by the Quality Assurance Inspector appeared to be within welding procedure specification WPS-B-P-2212-TC-U5B.

The Quality Assurance Inspector observed ZPMC Caltrans approved welder 067656 utilizing the shielded metal arc welding process (SMAW). Welding tack welds joining temporary pad eyes to skin plate C South Tower Assembly. The Quality Assurance Inspector observed ZPMC Quality Control Personnel record parameters and

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verify preheat temperatures. The welding parameters observed by the Quality Assurance Inspector appeared to be within welding procedure specification WPS-B-P-2214-TC-U5B.

The Quality Assurance Inspector observed ZPMC perform thermal cutting on skin plate P571.

Skin Plate E South Tower

The Quality Assurance Inspector observed ZPMC Caltrans approved welders 066041 and 067500, utilizing the flux core arc welding (FCAW) process on a partial joint penetration joint joining longitudinal stiffener weld number SSDI-SA16 A/G to skin plate A South Tower Assembly. The Quality Assurance Inspector observed ZPMC Quality Control Personnel record parameters and verify preheat temperatures. The welding parameters observed by the Quality Assurance Inspector appeared to be within welding procedure specification WPS-B-T-2332-TC-P5-F.

The Quality Assurance Inspector observed ZPMC personnel removing visual indications in the filler pass on various longitudinal stiffeners to skin plate tower assemblies.

Bay 2

The Quality Assurance Inspector observed ZPMC utilizing a milling machine in the beveling process on longitudinal stiffener P378A.

The Quality Assurance Inspector observed ZPMC personnel perform thermal cutting on floor beam assembly plate FB 37.

The Quality Assurance Inspector observed ZPMC personnel perform ultrasonic weld testing on skin plate C East Tower Assembly.

Skin Plate D East Tower

The Quality Assurance Inspector observed ZPMC Caltrans approved welders 053680 and 056134, utilizing the shielded metal arc welding process (SMAW). Welding tack welds joining longitudinal stiffeners to skin plate D South Tower Assembly. The Quality Assurance Inspector observed ZPMC Quality Control Personnel record parameters and verify preheat temperatures. The welding parameters observed by the Quality Assurance Inspector appeared to be within welding procedure specification WPS-B-P-2212-TC-U5B.

Skin Plate E East Tower

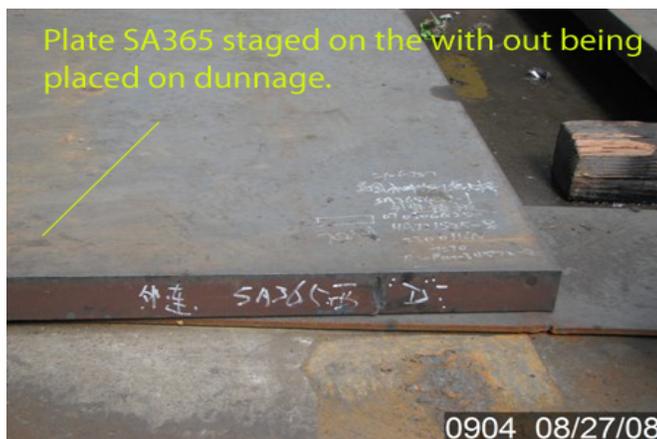
The Quality Assurance Inspector observed ZPMC Caltrans approved welders 068927 and 067947, utilizing the flux core arc welding (FCAW) process on a partial joint penetration joint joining longitudinal stiffener weld number SSDI-SA16 A/G to skin plate A South Tower Assembly. The Quality Assurance Inspector observed ZPMC Quality Control Personnel record parameters and verify preheat temperatures. The welding parameters observed by the Quality Assurance Inspector appeared to be within welding procedure specification WPS-B-T-2332-TC-P5-F.

The Quality Assurance Inspector observed plate number SA365 staged on the ground floor without being placed on the dunnage. The Quality Assurance Inspector informed American Brigde/ Flour Representative CK Chan about the issue. ABF Rep. CK Chan informed the Quality Assurance Inspector the issue will be fixed. The

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Quality Assurance Inspector observed plate SA365 was placed on dunnage by ZPMC.



Summary of Conversations:

No relevant conversations on this date.

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 Joshua Ishibashi, (707) 649-5453, who represents the Office of Structural Materials for your project.

Inspected By: Lara, Raymond

Quality Assurance Inspector

Reviewed By: Lanz, Joe

QA Reviewer