

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-009174**Date Inspected:** 11-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Wan Wen Zhong, Li Hong Fei	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:	OBG and Tower Components	

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector George Goulet was present during the times noted above for observations relative to the work being performed.

Trial Assembly Area

This QA Inspector randomly observed the following in response to ZPMC Bolting Inspection Notification Sheet No. 000150:

Segment 4BW/FL3, panel points 26~28 – 3 floor beam to the south side panel connections, 12 bolts each and
Segment 3AW/FL3, panel points 20~22 – 3 floor beam to the south side panel connections, 12 bolts each:

Upon arrival to the area ZPMC workers informed this QA inspector that the inspection of Segment 4BW/FL3, panel points 26~28 – 3 floor beam to the south side panel connections, 12 bolts each was cancelled. No reason was given for the cancellation.

This QA inspector climbed a ladder to observe the first of 3 bolted connections for bolt tensioning verification and observed a 1.8mm gap between the faying surface of FL3 and side panel bolted connection in Lift 3AW/FL3 at PP 22. Upon closer inspection, this QA inspector observed that the bolted connection appeared to have been welded for a length of approximately 40mm at 2 or more points before the joint was brought into firm contact. These welds do not appear to be shown on shop drawings. This QA inspector informed ZPMC QC Zhang Hai Jun and ABF Representative He Yong that this QA inspector would generate an incident report concerning the above noted issues. This QA inspector observed all 3 bolted connections appeared to be welded and discontinued the

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inspection.

Bay 10

This QA Inspector randomly observed the following work in progress in Bay 10:

SMAW welding of weld joint ED1-A6003-1-18, 20 located on east tower. Welders were identified respectively as 040333, 053050. ZPMC QC was identified as CWI Wan Wen Zhong (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Yuan Hui Gang, who was not a CWI. The welding variables recorded by QC1 and QC1's assistant appeared to comply with WPS-B-T-2113. Also at this location and appearing to be monitoring the welding and recording data was ABF Representative Li Shi You.

SMAW welding of weld joint ED1-A6003-2-52 located on east tower. Welder was identified as 056200. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Yuan Hui Gang, who was not a CWI. The welding variables recorded by QC1 and QC1's assistant appeared to comply with WPS-B-T-2113. Also at this location and appearing to be monitoring the welding and recording data was ABF Representative Li Shi You.

SMAW welding of weld joint ED1-A6003-2-50 located on east tower. Welder was identified as 040268. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Yuan Hui Gang, who was not a CWI. The welding variables recorded by QC1 and QC1's assistant appeared to comply with WPS-B-T-2112. Also at this location and appearing to be monitoring the welding and recording data was ABF Representative Li Shi You.

SMAW pick up welding of weld joint S STL3-1B/K-77, 78 located on south tower, lift 3, skins C to D corner. Welder was identified as 053829. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Yuan Hui Gang, who was not a CWI. The welding variables recorded by QC1 and QC1's assistant appeared to comply with WPS-345-SMAW-2G(2F)-repair.

Bay 11

This QA inspector randomly observed the following work in progress in Bay 11:

FCAW welding of weld joints ESTL3-4B/K-77, 78 located on east tower, lift 3. Welder was identified as 070254. ZPMC QC was identified as CWI Li Hong Fei (QC2). The welding variables recorded by QC2 appeared to comply with WPS-B-T-2332-Tc-P5-F for weld 77 and WPS-B-T-2331-Tc-P5-F for weld 78.

SMAW welding of base metal located on east tower, lift 3, skin C. Welder was identified as 049099. ZPMC QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-345-SMAW-4G(4F)-repair. Also at this location and appearing to be monitoring the welding and recording data was ABF Representatives Samuel Chen and Zhang Xiong.

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

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Summary of Conversations:

No relevant conversations on this date except as noted 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, 134-8257-0045, who represents the Office of Structural Materials for your project.

Inspected By:	Goulet, George	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer
