

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-012626**Date Inspected:** 14-Mar-2010**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:** See below**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 and OBG Components**Summary of Items Observed:**

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

Bay 10

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

SAW welding of weld joint SSD1-TL5-1B-F-3A located outside PCMK south tower, lift 5, skins A/E corner.

Welder was identified as 052917. ZPMC QC was identified as CWI Du Zhi Qun (QC1). The welding variables recorded by QC1 appeared to comply with WPS-B-T-3221-TC-U5-S-1.

Bay 11

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

SMAW welding of weld joint WSD1-TL5-4B/F-6A located inside PCMK west tower, lift 5, skins D/E corner.

Welder was identified as 046704. ZPMC QC was identified as CWI An Qingxiang (QC2). The welding variables recorded by QC1 appeared to comply with WPS-B-T-3211-TC-U4b-1. Also present at this location and appearing to be monitoring the welding related operations were ABF Representatives Luo Lai Quan and Wang Jiang Hua.

SMAW welding of weld joint WSD1-TL5-4B/F-17A located inside PCMK west tower, lift 5, skins D/E corner.

Welders were identified as 040614, 060690. ZPMC QC was identified as QC2. The welding variables recorded by QC1 appeared to comply with WPS-B-T-3211-TC-U4b-1. Also present at this location and appearing to be

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monitoring the welding related operations were ABF Representatives Luo Lai Quan and Wang Jiang Hua.

SMAW welding of weld joint WSD1-TL5-4B/F-2A located inside PCMK west tower, lift 5, skins C/D corner. Welder was identified as 040655. ZPMC QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-B-T-3212-TC-U4b-1. Also present at this location and appearing to be monitoring the welding related operations was ABF Representatives Luo Lai Quan and Wang Jiang Hua.

SMAW welding of weld joint WSD1-TL5-4B/F-38B located inside PCMK west tower, lift 5, skins C/D corner. Welder was identified as 040667. ZPMC QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-B-T-3212-TC-U4b-1. Also present at this location and appearing to be monitoring the welding related operations was ABF Representatives Luo Lai Quan and Wang Jiang Hua.

Heavy Dock

This QA Inspector randomly observed the following work in progress on the Heavy Dock:

FCAW welding of weld joint WSD1-SA27-9-22 located outside PCMK west tower, lift 1 base, skin B, shear plate stiffener to connection plate. Welder was identified as 070022. ZPMC QC was identified as CWI You Qi Guo (QC3). Assisting QC3 at this location and appearing to be monitoring the welding and recording data was ZPMC QC He Gen, who was not a CWI. The welding variables recorded by QC3's assistant appeared to comply with WPS-B-T-2333-TC-P4-F. Also present at this location and appearing to be monitoring the welding related operations were ABF Representatives Kong Xian Hui and Kang Yi.

A moderate rain was falling at the time of the observance of the welding work at the base of the towers on the heavy dock and water was collecting in areas of the tarps draped over the welding locations. All welding locations appeared to be well protected during this QA Inspector's visit to the base of the towers. This QA Inspector talked to both QC3 and ZPMC QA He Gen about the importance of controlling the rain water accumulation in the protective tarp covers and keeping the rain water from entering the weld areas. Both QC3 and ZPMC QA He Gen told this QA Inspector that they understood the importance of this issue.

FCAW welding of weld joint WSD1-SA27-9-28 located outside PCMK west tower, lift 1 base, skin B, shear plate stiffener to connection plate. Welder was identified as 068919. ZPMC QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding and recording data was ZPMC QC He Gen, who was not a CWI. The welding variables recorded by QC3's assistant appeared to comply with WPS-B-T-2333-TC-P4-F. Also present at this location and appearing to be monitoring the welding related operations were ABF Representatives Kong Xian Hui and Kang Yi.

FCAW welding of weld joint WSD1-SA225F/H-28 located outside PCMK west tower, lift 1 base, skin E, shear plate stiffener to connection plate. Welder was identified as 066481. ZPMC QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding and recording data was ZPMC QC He Gen, who was not a CWI. The welding variables recorded by QC3's assistant appeared to comply with WPS-B-T-2333-TC-P4-F. Also present at this location and appearing to be monitoring the welding related operations were ABF Representatives Kong Xian Hui and Kang Yi.

FCAW welding of weld joint NSD1-SA76F/H-39 located outside PCMK north tower, lift 1 base, skin E, shear

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plate stiffener to connection plate. Welder was identified as 053869. ZPMC QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding and recording data was ZPMC QC He Gen, who was not a CWI. The welding variables recorded by QC3's assistant appeared to comply with WPS-B-T-2333-TC-P4-F. Also present at this location and appearing to be monitoring the welding related operations were ABF Representatives Kong Xian Hui and Kang Yi.

FCAW welding of weld joint NSD1-SA76F/H-40 located outside PCMK north tower, lift 1 base, skin E, shear plate stiffener to connection plate. Welder was identified as 040533. ZPMC QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding and recording data was ZPMC QC He Gen, who was not a CWI. The welding variables recorded by QC3's assistant appeared to comply with WPS-B-T-2333-TC-P4-F. Also present at this location and appearing to be monitoring the welding related operations were ABF Representatives Kong Xian Hui and Kang Yi.

FCAW welding of weld joint NSD1-SA76F/H-52 located outside PCMK north tower, lift 1 base, skin E, shear plate stiffener to connection plate. Welder was identified as 054069. ZPMC QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding and recording data was ZPMC QC He Gen, who was not a CWI. The welding variables recorded by QC3's assistant appeared to comply with WPS-B-T-2333-TC-P4-F. Also present at this location and appearing to be monitoring the welding related operations were ABF Representatives Kong Xian Hui and Kang Yi.

The tower access elevator was not manned after 2045 hours and it appeared that no work was being performed at the lift1/ lift 2 joints of either of the towers.

OBG segments 5E, 5W, and CB4 were located near the end of the heavy dock. No work was observed being performed on CB4. All work randomly observed at 5E and 5W was being performed on temporary members installed to support the lifting of the segments.

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

Summary of Conversations:

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 Skyler Guest, 150-0042-2360, who represents the Office of Structural Materials for your project.

Inspected By:	Goulet,George	Quality Assurance Inspector
Reviewed By:	Dawson,Paul	QA Reviewer
