

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-013104**Date Inspected:** 26-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 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:

SMAW welding of weld joint NSD1-TL5-3B/F-38A located on PCMK north tower, lift 5, skins B/C corner.

Welder was identified as 500363. QC was identified as ZPMC CWI Du Zhi Qun (QC1). The welding variables recorded by QC1 appeared to comply with WPS-B-T-3212-TC-U4b-1.

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

Welder was identified as 500363. QC was identified as ZPMC CWI Du Zhi Qun (QC1). The welding variables recorded by QC1 appeared to comply with WPS-B-T-3212-TC-U4b-1.

Bay 11

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

Fit-up and SMAW tack welding of run-off plates at weld joint ESD1-TL5-2B/F-20A located on PCMK east tower, lift 5. Welder was not identified except possibly by a number written into the weld identification area. The number was 203272. When this QA Inspector approached the work site, observed an oxy-fuel torch not connected to a supply hose, and began questioning the ZPMC QC Inspector about preheat requirements, the entire crew

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abruptly left the area, including the QC Inspector, who was also unidentified and not recognized by this QA Inspector. This QA Inspector observed an arc strike near one of the two run-off plates and marked it with yellow paint for further magnetic particle inspection. See photos below. No apparent ZPMC CWI's or ABF representatives were in the area.

Heavy Dock

This QA Inspector randomly observed the following work in progress on the heavy dock.

FCAW welding of weld joint NSD1-SA22B/E-19 located outside PCMK north tower, lift 1 base, skin D, shear plate stiffener to connection plate. Welder was identified as 053116. QC was identified as ZPMC CWI Gong Liang Zhu (QC2). Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Yang Mingming, who was not a CWI. The welding variables recorded by QC2's assistant appeared to comply with WPS-B-T-2333-TC-P4-F.

FCAW welding of weld joint NSD1-SA22B/E-40 located outside PCMK north tower, lift 1 base, skin D, shear plate stiffener to connection plate. Welder was identified as 068753. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Yang Mingming, who was not a CWI. The welding variables recorded by QC2's assistant appeared to comply with WPS-B-T-2333-TC-P4-F.

FCAW welding of weld joint NSD1-SA17F/G-42 located outside PCMK north tower, lift 1 base, skin C, shear plate stiffener to connection plate. Welder was identified as 053116. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Yang Mingming, who was not a CWI. The welding variables recorded by QC2's assistant appeared to comply with WPS-B-T-2333-TC-P4-F.

FCAW welding of weld joint NSD1-SA17F/G-60 located outside PCMK north tower, lift 1 base, skin C, shear plate stiffener to connection plate. Welder was identified as 069866. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Yang Mingming, who was not a CWI. The welding variables recorded by QC2's assistant appeared to comply with WPS-B-T-2333-TC-P4-F.

FCAW welding of weld joint NSD1-SA17F/G-23 located inside PCMK north tower, lift 1 base, skin C, shear plate stiffener to connection plate. Welder was identified as 068596. QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-B-T-2333-TC-P4-F.

FCAW welding of weld joint NSD1-SA76F/G-7 located inside PCMK north tower, lift 1 base, skin E, shear plate stiffener to connection plate. Welder was identified as 066165. QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-B-T-2333-TC-P4-F.

FCAW welding of weld joint NSD1-SA22B/E-34 located inside PCMK north tower, lift 1 base, skin D, shear plate stiffener to connection plate. Welder was identified as 057266. QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-B-T-2333-TC-P4-F.

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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