

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-009551**Date Inspected:** 09-Oct-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:** 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 George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 10

This QA Inspector observed tower struts with what appeared to be minor impact damage at the outer edges. The most significant damage observed was to the lower outer corner on PCMK ED1-6003-3. A photo of that damage can be seen below. An arc strike was also observed at the top middle edge on PCMK ED1-6003-4. These issues were brought to the attention of ABF Representative Xie Yan (ABF1). ABF1 told this QA Inspector that she was aware of these issues and informed this QA Inspector that these parts were not yet ready for inspection.

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

FCAW welding of weld joint NSD1-SPSA3-70-2A located on PCMK north tower, lift 3, splice plate. Welder was identified as 040533. ZPMC QC was identified as CWI Tu Jun (QC1). The welding variables recorded by QC1 appeared to comply with WPS-B-T-2231-TC-U5-F.

FCAW welding of weld joints SSSL4-1C/L-132, 148 located inside PCMK south tower, lift 4, skin C to the top of 119M diaphragm. Welder was identified as 057180. ZPMC QC was identified as Wang Chuan Qing (QC2). The welding variables recorded by QC2 appeared to comply with WPS-B-T-4332-TC-P5-F.

FCAW welding of weld joints SSSL4-1C/L-153, 133 located inside PCMK south tower, lift 4, skin C to the inside

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of 119M diaphragm. Welder was identified as 057266. ZPMC QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-B-T-4332-TC-P5-F.

FCAW welding of weld joint SSSL4-1G/L-130, 131 located inside PCMK south tower, lift 4, skin C to the top of 127M diaphragm. Welders were identified respectively as 053166, 054069. ZPMC QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-B-T-4332-TC-P5-F.

FCAW welding of weld joints SSSL4-4I/L-126, 145 located inside PCMK south tower, lift 4, skin C to the inside of 135M diaphragm. Welder was identified as 052075. ZPMC QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Li Peng Fei, who was not a CWI. The welding variables recorded by QC2's assistant appeared to comply with WPS-B-T-4332-TC-P5-F.

FCAW welding of weld joints SSSL4-4I/L-127, 146 located inside PCMK south tower, lift 4, skin C to the inside of 135M diaphragm. Welder was identified as 053869. ZPMC QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Li Peng Fei, who was not a CWI. The welding variables recorded by QC2's assistant appeared to comply with WPS-B-T-4332-TC-P5-F.

Bay 11

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

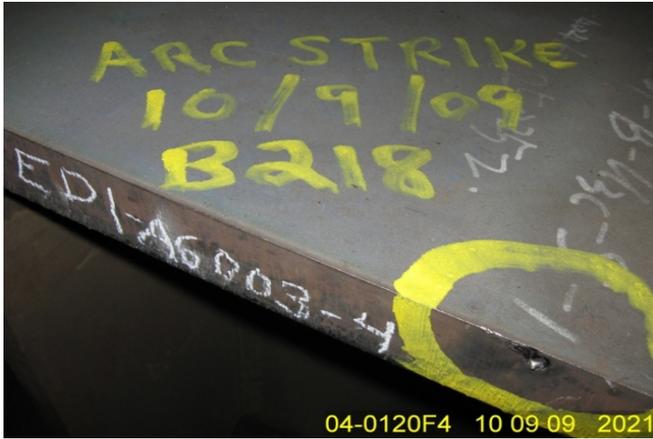
SAW welding of weld joints WSD1-SPSA3-2-89M-1-1A, WSD1-SPSA3-2-89M-1-2A, WSD1-SPSA3-2-89M-2-1A, WSD1-SPSA3-2-89M-2-2A located on PCMK west tower. Welder was identified as 040699. ZPMC QC was identified as CWI Li Lin (QC2). The welding variables recorded by QC appeared to comply with WPS-B-T-4221-B-U3c-S-1.

SMAW welding of various fit-up plates inside PCMK west tower shaft, lift 1, skin B, near the lift 1/lift 2 joint. Welder was identified as 203793. 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 Inspector Cao Cheng, who was not a CWI. The welding variables recorded by QC3's assistant appeared to comply with WPS-B-T-2112.

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 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: Dawson, Paul

QA Reviewer