

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-011059**Date Inspected:** 02-Jan-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:

Drilling through previously pilot-scored holes into PCMK south tower, lift 2, skin plate A at 65M and 77M double diaphragm doubler plates, from the outside in. No template was being used.

SMAW repair welding of weld joint SSSL4-1B/L-4A located outside PCMK south tower, lift 4, skins A/B corner at 136M elevation. Welder was identified as 040581. ZPMC QC was identified as CWI Du Zhi Qun (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC Yuan Hui Gang, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-2113. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Li Nan.

FCAW welding of weld joints SSSL4-1B/L-49, 53 located inside PCMK south tower, lift 4, skins B/C, top and bottom of diagonal corner plate between 140M and 142M elevations. Welder was identified as 053316. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-2331-TC-P4-F for weld 49 and WPS-B-T-2332-TC-P4-F for weld 53.

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FCAW welding of weld joints SSTL4-1B/L-24, 20 located inside PCMK south tower, lift 4,skins C/D, top and bottom of diagonal corner plate between 140M and 142M elevations. Welder was identified as 054069. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-2331-TC-P4-F for weld 24 and WPS-B-T-2332-TC-P4-F for weld 20.

FCAW welding of weld joints SSTL4-1B/L-49, 53 located inside PCMK south tower, lift 4,skins B/C, top and bottom of diagonal corner plate between 136M and 138M elevations. Welder was identified as 040343. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-2331-TC-P4-F for weld 49 and WPS-B-T-2332-TC-P4-F for weld 53.

FCAW welding of weld joints SSTL4-1B/L-24, 20 located inside PCMK south tower, lift 4,skins C/D, top and bottom of diagonal corner plate between 136M and 138M elevations. Welder was identified as 050041. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-2331-TC-P4-F for weld 24 and WPS-B-T-2332-TC-P4-F for weld 20.

FCAW welding of weld joints SSTL4-1B/L-49, 53 located inside PCMK south tower, lift 4,skins B/C, top and bottom of diagonal corner plate between 132M and 134M elevations. Welder was identified as 206825. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-2331-TC-P4-F for weld 49 and WPS-B-T-2332-TC-P4-F for weld 53.

Blast Shop #1

This QA Inspector and Caltrans QA Inspector Paul Dawson performed random visual inspections of the upper interior areas of OBG Segment 8BW between panel point 66 to panel point 67 as per ZPMC request number 2423, Document No. PR008, Rev. 03. ZPMC had recently completed grit blasting of these areas and the steel surfaces are now mostly free of rust oxide and other contaminants that had previously obscured portions of the plate and weld surfaces. This QA Inspector visually observed approximately 50 locations that required grinding to resolve visual weld spatter, arc strikes, shallow nicks, scrapes, and other minor surface rejections. The areas were marked with colored chalk and ZPMC had several workers using grinders to remove the visually unacceptable areas and ZPMC had assigned a magnetic particle test (MT) inspector to perform MT of the arc strike removal areas. Three welds were also observed to be incomplete. These areas were marked for weld repair.

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

Summary of Conversations:

No relevant conversations.

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.

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Inspected By: Goulet,George

Quality Assurance Inspector

Reviewed By: Dawson,Paul

QA Reviewer