

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018423**Date Inspected:** 15-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Shi Hei			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:	Trial Assembly, Bay 6		

Summary of Items Observed:

On this day Caltrans OSM Quality Assurance (QA) Inspector Christopher D'souza was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhen Hua Port Machinery Company (ZPMC) at Chang Xing Island in Shanghai, China. QA Inspector observed and/or found the following:

Bay 6 (CWR verifications)

B-CWR 2199 Rev 0 (Type - Buttering)

This QA Inspector was notified via email for verification of B – CWR 2199 R0 at 0820 hours the following was observed:

- The component for verification was identified as CB18
- It was observed that weld metal and base metal between BP3055 and PL3290A was visually rejected as excessive metal was ground out due to operator error while grinding the weld flush
- Weld buildup/ buttering is to be performed
- ZPMC QC Huang Min was present on site to direct and record all repair work.
- WPS to be used for repair was WPS-345-SMAW-2G(2F)-Repair

OBG Trial assembly

Welding (In-process)

11DW to 11EW holdbacks

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This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG071A-044 and SEG073A-013 (11DW to 11EW Bottom plate to Side plate holdback weld @ W3). The welder is identified as #046709 and #040611 observed welding in the 4G position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG071A-045 and SEG073A-014 (11DW to 11 EW Bottom plate to Side plate holdback weld @ W4). The welder is identified as #040656 and #067904 observed welding in the 4G position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

Base metal repair (BMR)

This QA Inspector observed BMR being performed on areas adjacent to 11DW – 11EW side plate transverse splice. BMR was being performed utilizing SMAW process. Repairs were performed as per requirements of B-CWR 1842 Rev 0 (Repairs after removal of temp. attachments on transverse splices) and WPS-345-SMAW-4G(4F)-FCM-repair-1

For the above mentioned welding activities ZPMC Quality Control (QC) Inspectors are identified as Shi Hei.

CWR verifications

Type – (D-scan)

This QA Inspector was notified via email for verification of B – CWR 2185 Rev 2, B – CWR 2186 Rev 2 and B – CWR 2187 Rev 2 at 1300 hours the following was observed:

- The component for verification was identified as
 - OBE11B-009 (11BE + 11CE SP transverse splice @ C5)
 - OBE11B-007 (11BE + 11CE SP transverse splice @ E7)
 - OBE11B-008 (11BE + 11CE BP transverse splice @ D6)
- Weld repair was to be performed on location where rejectable indication was observed during UT (ABF UT Report UT-11E-044R3, UT-11E-045R3 and UT-11E-043R3)
- ZPMC QC Wang Li Yang was present on site to direct and record all repair work.
- WPS to be used for repair was WPS-345-SMAW-1G(1F)-FCM-Repair-1, WPS-345-SMAW-3G(3F)-FCM-Repair-1 and WPS-345-SMAW-4G(4F)-FCM-Repair-1

ABF verification request: 11142010-1

This QA Inspector performed Ultrasonic Testing (UT) on lift 11 OBG components identified as 11BE-11CE Edge panel to Edge panel transverse splice weld @ F9 (OBE11-006) in conjunction with ABF ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3 and Detection of Transverse Planar Discontinuities with Significant Flaw Height Dimension Procedure. The QA Inspector no observed rejectable indications at the time of testing.

QA Inspector generated a TL-6027 for this date

NDE observations:-

11CE – 11DE (DP to DP transverse weld) – UT being performed by ABF for detection of transverse planar

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discontinuity (D-scan)

11BE – 11CE (DP to EP Holdbacks @ E2) – UT being performed by ABF for detection of transverse planar discontinuity (D-scan)

11CW – 11DW (DP to DP transverse weld) – UT being performed by ABF for detection of transverse planar defects (D-scan)

11BW – 11CW (SP to SP transverse weld @ E7, E8) – UT being performed by CT for detection of transverse planar defects (D-scan)

11AE – 11BE (SP to SP transverse weld @ C5) – UT being performed by CT for detection of transverse planar defects (D-scan)

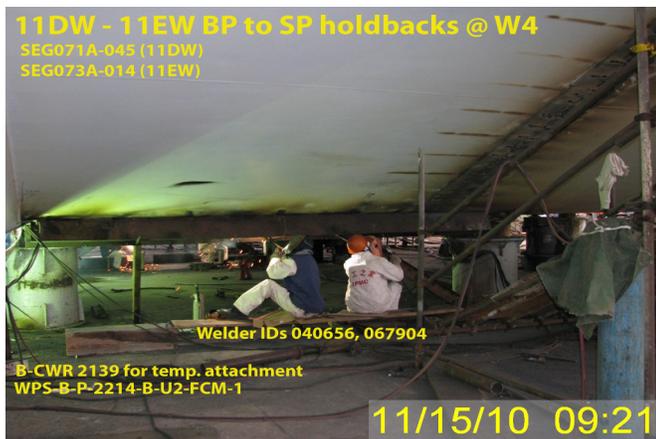
11BE – 11CE (DP to DP transverse weld) – UT being performed by CT for detection of transverse planar defects (D-scan)

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



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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 Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Dsouza,Christopher

Quality Assurance Inspector

Reviewed By: Carreon,Albert

QA Reviewer