

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017879**Date Inspected:** 06-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhu Zhong Hai.**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:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

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

Trial assembly yard, 11AW, PP95, CW side, DP I-rib, Built up.

SMAW Repair welding (Built up) of I-ribs (WRR # B-WR16348); located at Trial assembly yard. Welders are identified as 040667; ZPMC Quality Control Inspector (QC) is identified as Zhu Zhong Hai. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-345-SMAW-3G(3F)-FCM-REPAIR-1. The attached photographs provide additional detail.

Trial assembly yard, 11AE-11BE, SP-C4.

SMAW Critical Weld Repair welding (Ultrasonic Inspection repair per AB/F UT-report # UT-11E-038R1) of weld joint OBW11B-005 (CWR # B-CWR2161); located at Trial assembly yard. Welder is identified as 040320; ZPMC Quality Control Inspector (QC) is identified as Wang Li Yang. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-345-SMAW-4G(4F)-FCM-REPAIR-1.

Trial assembly yard, 11BW-11CW, SP-T-ribs, CB side.

Per ZPMC's notification by e-mail dated 11-06-10; ZPMC notified about removing welds off the T-ribs on side panel (Cross beam side) at transverse splice between OBG segment 11BW-11CW. Per ZPMC Weld repair report (WRR # B-WR16601), the Welds were identified as SP728-001-017, 018, 019, 020, 023, 024, 002, 009, 010 & SP504-001-038, 039, 055 (Total 12 Nos.). ZPMC found misaligned T-ribs at above mentioned locations.

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On this date this QA inspector witnessed ZPMC removing welds with Carbon –air Arc gouging. Welds identified as SP782-001-017, 018, 019, 020, 023, 024 & SP504-001-038, 039 (T-rib hold back fillet welds). Quality Control Inspector (QC) present was identified as “Zhu Yuan Yuan”. The attached photographs provide additional detail.

This QA Inspector carried out NDE on following
Trial assembly yard, 11BW-11CW.

This QA Inspector performed verification Ultrasonic Testing (ABF Request No: UT-11W-049R1) in accordance with ABF/CT Pattern “D” UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a separate data sheet that Caltrans QA generates after performing a joint inspection with ABF ultrasonic testing personnel. The location of the inspection was identified as weld between Deck panel & Edge panel at the intersection of OBG Segment 11BW- 11CW, Counter weight Side. The weld designations were as;

- 1) CA083-006. (11BW-11CW, DP-EP-W2);
- 2) CA085-002. (11BW-11CW, DP-EP-W2).

Trial assembly yard, 11BW-11CW.

This QA Inspector performed verification Ultrasonic Testing (ABF Request No: UT-11W-051R1) in accordance with ABF/CT Pattern “D” UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a separate data sheet that Caltrans QA generates after performing a joint inspection with ABF ultrasonic testing personnel. The location of the inspection was identified as weld between Side panel & Edge panel at the intersection of OBG Segment 11BW- 11CW, Cross beam Side. The weld designations were as;

- 1) SEG067A-046. (11BW-11CW, SP-EP-W6);
- 2) CA086-005. (11BW-11CW, SP-EP-W6).

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.

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, 1500.042.2372, who represents the Office of Structural Materials for your project.

Inspected By: Juvekar,Amit

Quality Assurance Inspector

Reviewed By: Dsouza,Christopher

QA Reviewer