

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016094**Date Inspected:** 07-Aug-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:** Yang Bai Qian.**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.

Subassembly, Bay 04, 13BW, Deck panel to U-rib.

FCAW Repair welding of partial penetration weld joints DP3130-001-005, 002; located on subassembly, Bay 04, 13CW. Welder is identified as 062265; ZPMC Quality Control Inspector (QC) is identified as Yang Bai Qing. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-345-FCAW-2G(2F)-FCM-REPAIR.

Y-Locations for the repairs were;

W005 – 550mm.

W002 – 4750mm.

Subassembly, Bay 04, Deck Panel 13BW-DP3136-001.

This QA Inspector performed Phased Array Ultrasonic Testing (PAUT) following the guide lines of UT procedure titled “Phased Array Ultrasonic Testing for the Detection and Sizing of Suspected Planar Discontinuities (Cracks) in PJP Welds, # UT 04-0120F4 PJP Rib Weld” after ZPMC welding personnel performed weld repairs of tacked areas of the Partial Joint Penetration (PJP) welds joining u-ribs to deck plate. The deck panel examined is as follows:

DP3136-001: 1 tack weld location found compliant and no tack weld location found non-compliant.

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Subassembly, Bay 04, 13CW, Deck Panel U-ribs.

During Random Visual in process Inspection, this QA inspector observed ZPMC NDT personnel “Yuan Tao” carrying out Magnetic Particle Testing (MT) on Deck panel to U-rib welds. Deck Panel identified as DP3147-001. The attached photographs provide additional detail.

Subassembly, Bay 09, 14W, Continuity Stiffener inside U-Rib.

FCAW welding of weld complete penetration joint DP3172-001-249, 246, 147, 144; located on subassembly, Bay 09, 14W. Welders are identified as 203805, 059416; ZPMC Quality Control Inspector (QC) is identified as Chen Shigang. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2233-TC-U4B-F. The attached photographs provide additional detail.

This QA Inspector carried out NDE on following
Subassembly, Bay 04, U-Rib to Deck Plate welds.

This QA inspector performs Random Visual Testing (VT) & random Magnetic Particle Testing (MT) of approximately 15% area previously tested and accepted by ZPMC Quality Control personnel (Notification # 06353). This QA Inspector generated an MT report (TL-6028) for this date. The members are identified as DP3093-001.

During the Quality Assurance Magnetic particle Testing (MT) review of welds located on Deck Panel (DP 3093-001), this Quality Assurance Inspector (QA) discovered three (3) transverse indication measuring approximately 2mm & 3mm in length at Y location 650mm. The weld is identified as: DP 3093-001-008.

ZPMC excavated above mentioned location. Excavation depth measured approximately 5mm.

Incident report submitted on same date provides additional details.

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



Summary of Conversations:

No relevant conversations.

Comments

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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:	Carreon,Albert	QA Reviewer
