

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-015049**Date Inspected:** 08-Jun-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 Jie.**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 day CALTRANS OSM Quality Assurance (QA) Inspector Amit Juvekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

Subassembly, Bay 09, 13BE, Continuity Stiffener inside U-Rib.

FCAW welding of weld complete penetration joint DP3092-001-259, 260, 255, 256; located on subassembly, Bay 09, 13AW. Welder is identified as 062259; ZPMC Quality Control Inspector (QC) is identified as Zhu Zhong Jie. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2233-TC-U4B-F.

Subassembly, Bay 09, 13BE, Continuity Stiffener inside U-Rib.

FCAW welding of Fillet weld Partial Penetration joint DP3092-001-129, 121; located on subassembly, Bay 09, 13AW. Welder is identified as 062259; ZPMC Quality Control Inspector (QC) is identified as Zhu Zhong Jie. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2133.

Subassembly, Bay 09, Deck Panel DP3131-001.

This QA inspector performed conventional Ultrasonic Testing (UT) Inspection on deck panel tack weld areas. The inspection is preliminary prior to using the phased array (PAUT) testing system to verify indications found with conventional Ultrasonic testing. QA inspector performed UT on deck panel DP3131-001, 4 ribs, 08 welds, 72

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total tack welds inspected.

- Weld 1 scanned 9 locations with no indication.
- Weld 2 scanned 9 locations with no indications.
- Weld 3 scanned 9 locations with no indications.
- Weld 4 scanned 9 locations with 1 indication.
- Weld 5 scanned 9 locations with 1 indications.
- Weld 6 scanned 9 locations with 1 indications.
- Weld 7 scanned 9 locations with 1 indications.
- Weld 8 scanned 9 locations with no indications.

QA Inspector performed initial 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 conventional UT was performed on tack welded areas of the Partial Joint Penetration (PJP) welds joining u-ribs to deck plate. The deck panels examined are as follows:

DP-3150A-001: 2 tack weld locations found compliant and 11 tack weld location found non-compliant.

DP-3131A-001: no tack weld locations found compliant and 5 tack weld location found non-compliant.

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