

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015394**Date Inspected:** 29-Jun-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:** Chen Shi Gang**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:** Bay 9, Bay4**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 4

DP3075-001 - 13AE (Weld repair on PAUT reject areas)

This QA Inspector observed ZPMC welding personals identified as 062265 performing Flux Cored Arc welding (FCAW) on DP3075-001 U-rib to deck plate PJP weld. ZPMC QC is identified as Zhang Qiao ABF QC Inspector is identified as Ye Jie Qian. The welding variables recorded by QC appeared to comply with the WPS - 345 - FCAW - 2G(2F) - FCM - Repair

Y-location of repairs were

Weld 1 - 950mm, 3950mm

Weld 2 - 2150mm, 2750mm, 6950mm

Weld 3 - 7550mm, 11750mm, 13950mm

Weld 4 - 4450mm, 7550mm, 9350mm

Weld 5 - 7550mm

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Weld 6 – 2150mm, 2750mm

Weld 7 – 950mm, 8150mm

Weld 8 – 950mm, 8750mm, 9350mm

Weld 9 – No excavations

Weld 10 – 50mm, 550mm, 2150mm, 3950mm, 5150mm, 5750mm, 6350mm, 7550mm

This QA Inspector verified the depth of the excavations and was found to be compliant with the repair requirement. Preheat and Post heat was in complaint with the approved FCM WPS

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:

DP3087-001: 1 tack weld location found compliant and 7 tack weld locations found non-compliant.

Tack weld locations found non-compliant are marked on U-rib and deck plate for ZPMC’s reference for repair. See Caltrans U-rib to Deck Panel- Tack Weld Assessment sheets dated 29th June, 2010 for further information on PAUT inspections.

This QA Inspector generated an incident report for “Excavation on Partial Joint Penetration (PJP) weld joint DP3073-001- 006 Y location 11600mm exceeded the thickness of the U – Rib”.

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

Inspected By:	Dsouza,Christopher	Quality Assurance Inspector
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Reviewed By:	Carreon,Albert	QA Reviewer
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