

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-009960**Date Inspected:** 24-Oct-2009**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:** Li Jha and Wu Chi Chang**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:** OBG Trail Assembly**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) S. Manjunath. Math was present during the times noted above for observations relative to the work being performed.

Orthotropic Box Girder (OBG) Trial Assembly Area

Ultrasonic Transverse Indication Evaluation

This QA Inspector Recorded the Y-Datum Line and the UT readings for the Transverse Segment to Segment weld "D" Scan as performed by Mr. Bert M Madison for the following Segment and generated the Ultrasonic Transverse Indication Evaluation Spread Sheet and Scatter Graph and submitted to Task Leaders for Review.

Segment 1AW-1AAW = Bottom Panel with weld no. OBW1A-003

Scanning done at repaired areas only at Y locations 100mm, 5680mm, 7040mm and for a length of 250mm, 250mm and 300mm respectively and found not recordable indications.

Segment 1AW-1AAW

Side Panel Cross Beam Side with weld no. OBW1A-004

Scanning done at repaired areas only at Y locations 900 to 2900 mm approximately 2000mm scanned and

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recorded a Class A Longitudinal Transverse Crack of 15mm length.

Lift 2 West

This QA Inspector observed ZPMC welding personnel performing Carbon Arc Gouging for removing the defects found by Ultrasonic Test. Noted down the “Y” Datum Line locations from the reference line and recorded the preheat temperature and approximately depth of excavations.

External Side

Y Location Start= 1000mm and Y Location Stops=1180 Length of excavation is 100mm depth 14mm.

Y Location Start= 2460mm and Y Location Stops=2570 Length of excavation is 110mm depth 14mm.

Y Location Start= 2670mm and Y Location Stops=2770 Length of excavation is 100mm depth 14mm.

Internal Side

Y Location Start= 1350mm and Y Location Stops=1410 Length of excavation is 60mm depth 14mm.

Y Location Start= 1640mm and Y Location Stops=1820 Length of excavation is 110mm depth 14mm.

Y Location Start= 2230mm and Y Location Stops=2990 Length of excavation is 100mm depth 14mm.

Lift 2 East

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Segment to Segment Transverse weld at Bottom Panel for UT rejected area for Segment 2AE to 2BE between PP 16 and PP 17 found by Scanning in D Pattern. The weld joint is identified as OBW2A-004. The welder is identified as 054467, 049769, 066261 and 048659. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-1G (1F)-FCM-Repair-1. The welding was been performed against Critical Welding Report B-CWR859 Rev.0.

Segment 5BW to 5CW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Counter Weight connecting plate welded at edge of Edge Panel at W1 and W2 location for facilitating the installation of Counter Weight. The weld joint is identified as OBW5G-007 and 008. The welder is identified as 220064 and 220069. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231-T-1.

Segment 5CE to 5BE

This QA Inspector observed ZPMC Heat Straightening personnel performing Heat Straightening for Longitudinal Diaphragm North and South side for segment 5CE to 5BE between PP 34 and 35 was in progress.

Segment 5BE

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This QA Inspector observed ZPMC personnel had cut and removed the Longitudinal Diaphragm and buttering been performed at the end and bevel preparation and flush grinding was in progress for segment 5BE at PP 32.

Segment 5AE

This QA Inspector observed ZPMC personnel burring the holes drilled for installing the Suspender Bracket at Bike Path side.

Segment 5CW

This QA Inspector observed ZPMC personnel drilling holes on T-Ribs of Bottom Panel between PP 35 and 36 for facilitating installation of Electric Support structure.

Segment 5CE

This QA Inspector observed ZPMC personnel drilling holes on Edge Panel next to Deck Panel for facilitating installation of Road Barrier.

Unless otherwise noted, all work observed on this date appeared to generally comply with 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 , who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
