

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-011067**Date Inspected:** 05-Jan-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:	Li Yang and Wu Zhi Cheng	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 date Caltrans OSM Quality Assurance (QA) Inspector, S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 5CE to 6AE

This QA Inspector along with Caltrans QA Manikandhan performed Joint Inspection with ABF Survey Team for the Longitudinal Diaphragm for 5CE to 6AE between Panel Point (PP) 36 and PP 37 North and South side.

Segment 6BW to 6CW

This QA Inspector observed ZPMC welding personnel performing Submerged Arc Welding (SAW) for Transverse Splice Weld for Deck Panel for Segment 6BW to 6CW. Weld identified as OBW6A-003. The welders are identified as 046830. In process SAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-223(2)1-T. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

Segment 6BW to 6CW

WELDING INSPECTION REPORT

(Continued Page 2 of 5)

This QA Inspector observed ZPMC welding personnel performing Submerged Arc Welding (SAW) for Transverse Splice Weld for Deck Panel Corner Assembly Counter Weight side for Segment 6BW to 6CW. Weld identified as OBW6A-002. The welders are identified as 046830. In process SAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-223(2)1-T. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

Segment 6BW to 6CW

This QA Inspector observed ZPMC welding personnel performing Submerged Arc Welding (SAW) for Transverse Splice Weld for Deck Panel Corner Assembly Cross Beam side for Segment 6BW to 6CW. Weld identified as OBW6A-004. The welders are identified as 046830. In process SAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-223(2)1-T. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

Segment 6CW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Floor Beam Extension at PP 45 for Segment 6CW. Weld identified as SSD25-PP45-047. The welder is identified as 051246. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231T. The parameters recorded by ZPMC QC were in compliance with WPS.

Segment 6BW to 6CW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Transverse Splice Weld for Side Panel Cross Beam side for Segment 6BW to 6CW. Weld identified as OBW6C-004. The welders are identified as 053609. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2233T. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

Segment 6BW to 6CW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Transverse Splice Weld for Side Panel Cross Beam side Corner Assembly for Segment 6BW to 6CW. Weld identified as OBW6C-005. The welders are identified as 053609. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2233T. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

Segment 6BW to 6CW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Transverse Splice Weld for Edge Panel Counter Weight side for Segment 6BW to 6CW. Weld identified as OBW6C-001. The welders are identified as 068917. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2213-B-U2-FCM-1. It was observed that the

WELDING INSPECTION REPORT

(Continued Page 3 of 5)

parameters noted down by ZPMC QC are in compliance with WPS.

Segment 6BW to 6CW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Transverse Splice Weld for Side Panel Corner Assembly Counter Weight Side for Segment 6BW to 6CW. Weld identified as OBW6C-001. The welder is identified as 053609. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2233T. It was observed that the root gap was exceeding the requirement of WPS thus ZPMC QC was having Welding Repair Report B-WR9652 Rev.0.

Segment 6BW to 6CW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Transverse Splice Weld for Side Panel Corner Assembly Counter Weight Side for Segment 6BW to 6CW. Weld identified as OBW6C-001. The welder is identified as 053609. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2233T. It was observed that the root gap was exceeding the requirement of WPS thus ZPMC QC was having Welding Repair Report B-WR9652 Rev.0.

Segment 6BW to 6CW

This QA Inspector observed ZPMC personnel performing Heat Straightening for the Longitudinal Diaphragm for Segment 6BW to 6CW between PP 40 and PP41. Heat straightening been performed as they were misaligned. Heat Straightening been performed against the Heat Straightening Report (HSR) HSR1 (B)-7992 Rev.0 Dated Dec 11, 2009 for the following weld Joints.

Seg 029B-007~008

Seg 029C-038~039

Seg 027D-035~038

Seg 029F-035~038

LD009A-001~010

LD010A-001~010

Segment 6AW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Counter Weight connecting plate for the Segment 6AW notice. Weld identified as OBW6F-004. The welder was identified as 037743. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2214-Tc-U4b-FCM-1.

Segment 5AW

This QA Inspector observed ZPMC repair welding personnel performing Flux Cored Arc Welding (FCAW) for

WELDING INSPECTION REPORT

(Continued Page 4 of 5)

Corner Assembly for the Segment 5AW. Weld identified as CA015-005. The welder was identified as 049769. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-FCAW-2G (2F)-FCM-Repair. Repair welding for the Corner Assembly been performed against the ZPMC Ultrasonic Test (UT) report no. B-787-UT-9569 and Welding Repair Report B-WR8556 Rev.0.

Segment CB5

This QA Inspector observed ZPMC personnel at CB5 connecting 6AW to 6AE deck panel FL3 extension to CB5 connection drilled splice plate placed all around the Cross Beam and match drilling is in progress at all the locations.

Segment 6AW

This QA Inspector observed ZPMC personnel at Segment 6AW Upper Chevron on PP 39 Turn of Nut is progress.

Segment 7AE to 6CE

This QA Inspector observed ZPMC personnel at 7AE to 6CE between PP 48 and PP 49 fit-up is in progress and segment to segment flame cutting for bevel preparation for Side Panel Cross Beam side.

Segment 6BE to 6CE

This QA Inspector observed ZPMC personnel at Segment 6BE to 6CE between PP 43 and PP 44 U-Ribs to U-Ribs internal side splice plate installation was in progress for match drilling.

Segment 5BE to 5CE

This QA Inspector observed ZPMC personnel at Segment 5BE to 5CE between PP 31 and PP 32 for Transverse Splice weld for Deck Panel Ultrasonic Test (UT) is been performed by ZPMC.

Segment 5CW to 6AW

This QA Inspector observed ZPMC personnel at Segment 5CW to 6AW between PP 36 and PP 37 for hold back area at Bottom Panel T-Ribs, Side Panel T-Ribs Cross Beam and Counter Weight side and Side Panel Corner Assembly Cross Beam and Counter Weight side grinding was in progress.

Segment 5CE

This QA Inspector observed ZPMC personnel at Segment 5CE for Cope Holes girding was in progress at Floor Beam to Bottom Panel and Floor Beam to Side Panel.

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

WELDING INSPECTION REPORT

(Continued Page 5 of 5)

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:	Miller,Mark	QA Reviewer
