

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-014833**Date Inspected:** 02-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:	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 Trial 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 8CE to 9AE (Longitudinal Diaphragm) Joint Survey

This QA Inspector performed Joint Inspection with ZPMC Survey Team and ABF Survey Team for the Longitudinal Diaphragm between Segment 8CE to 9AE (Field Segment Splice) between Panel Point (PP) 71 and PP 72 North (Cross Beam side) and South (Bike Path side) for Offset and Sweep. The offset was measured at 5 (five) different locations in which 2 (Two) locations were at Flange area and 3 (Three) locations were at Web area and Sweep was measured at 100 mm from both side from the Floor Beam and 800mm from both side of floor Beam and at Centre (Total 5 Locations). The measured readings were recorded on spread sheet and submitted to the Lead and Engineer for review.

Cope Hole Dimension Inspection

This QA Inspector performed dimension Inspection along with Caltrans QA Mr. Manoj for the Cope Holes at Bottom Panel to Floor Beam and Side Panel to Floor Beam for the following locations.

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

ABF Report CWAHIR-9CW-01 at Panel Point (PP) 77 at W4 Location, PP 78 at W3 and W4 Locations. The inspection was been performed after cope holes rectification as commented by Caltrans Inspectors in their previous inspection.

Segment 8CE

This QA Inspector performed dimension Inspection along with Caltrans QA Mr. Manoj for the Corner Assembly Cope Holes at Floor Beams and Intermediate Floor Beam dimension measurements at PP 67.5, PP 68, PP 68.5, PP 69, PP 69.5, PP 70, PP 70.5 and PP 71 Cross Beam and Bike Path Side.

Segment 8CE

This QA Inspector performed dimension Inspection against the NCR Report No. 000740 Dated 05/23/2010 for Segment 8CE to Cross Beam Stiffener alignment. Recorded 2mm offset at 1st Stiffener of Segment 8CE FL3 Stiffener to Cross Beam 10 Stiffener and 2mm offset at 2nd Stiffener of Segment 8CE FL3 Stiffener to Cross Beam 10 Stiffener at PP 68 (Reference from Bottom Plate for numbering Stiffener) the recorded observation forwarded to Lead for further action.

Floor Beam

This QA Inspector performed dimension Inspection against the NCR Report No. 000743 Dated 05/22/2010 for Floor Beam FB3108-001 for Flatness. Recorded 1mm deformation when measured with 2 meter string line in all directions.

Segment 8AW

This Quality Assurance (QA) Inspector observed ZPMC qualified welder performing Shielded Metal Arc Welding (SMAW) welding was performed on weld joint SSD25-PP063-153/154 FL3 Partial Height Diaphragm. Welder is identified as 067079. ZPMC QC is identified as Feng Ya Jung. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2233.

Segment 8AW

This Quality Assurance (QA) Inspector observed ZPMC qualified welder performing Shielded Metal Arc Welding (SMAW) welding was performed on weld joint SSD25-PP063-61 FL3 Partial Height Diaphragm. Welder is identified as 067609. ZPMC QC is identified as Feng Ya Jung. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2233.

Segment 8AW

This Quality Assurance (QA) Inspector observed ZPMC qualified welder performing Shielded Metal Arc Welding (SMAW) welding was performed on weld joint SSD25-PP063-042 FL3 area at Partial Height Diaphragm. Welder is identified as 066401. ZPMC QC is identified as Feng Ya Jung. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2113.

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

Segment 8AE

This QA Inspector observed ZPMC welding personnel performing welding by Flux Cored Arc Welding (FCAW) for Side Panel to Bottom Panel connecting weld at work point E4. The weld joints are identified as Seg044B-046 and Seg044B-047. The welder is identified as 220069. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-FCAW-2G (2F)-Rep-1. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS. The welding was performed against Welding Repair Report B-WR12900.

Segment 7DE

This QA Inspector observed ZPMC welding personnel performing welding by Shielded Metal Arc Welding (SMAW). The weld joints are identified as Seg040-065. The welder is identified as 058087. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2213-Tc-U4b-FCM-1. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

Segment 8AW

This Quality Assurance (QA) Inspector observed ZPMC qualified welder performing Shielded Metal Arc Welding (SMAW) welding was performed on weld joint SSD25-PP063-132 FL3 Partial Height Diaphragm. Welder is identified as 066459. ZPMC QC is identified as Wang Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2113.

Segment 8AW

This Quality Assurance (QA) Inspector observed ZPMC qualified welder performing Shielded Metal Arc Welding (SMAW) welding was performed on weld joint SSD25-PP063-136 FL3 Partial Height Diaphragm. Welder is identified as 067609. ZPMC QC is identified as Wang Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2212-B-U2-FCM-1.

Segment 8BW

This Quality Assurance (QA) Inspector observed ZPMC qualified welder performing Shielded Metal Arc Welding (SMAW) welding was performed on weld joint CA049-006 Counter Weight Side Deck Panel to Edge Panel at Corner Assembly. Welder is identified as 067610. ZPMC QC is identified as Zhang Xing Ming. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-Tc-U4b-FCM-1.

Segment 7BW

This Quality Assurance (QA) Inspector observed ZPMC qualified welder performing Shielded Metal Arc Welding (SMAW) welding was performed on weld joint OBW7N-003 Counter Weight Connecting Plate. Welder is identified as 069683. ZPMC QC is identified as Zhang Hai Tao. The welding variables monitored and recorded by

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

the QC appeared to comply with WPS-B-P-2214-Tc-U4b-FCM-1.

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 Eric T Sang 1500-0042-2372, who represents the Office of Structural Materials for your project.

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