

**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-009028**Date Inspected:** 20-Sep-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:** Xu Yumin**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 Areas

Segment 5BW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Longitudinal Stiffener as it was mis-aligned. The weld joint is identified as Seg. 024B-006 the welder is identified as 0677571. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-4G (4F)-FCM-Repair-1 and welding being carried out against B-WR-7430 Rev. 0.

Segment 1AW to 1AAW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Bottom Panel segment to segment transverse weld, weld being excavated at several locations due to UT reject indications. The weld joint is identified as OBW-1A-003. The welder is identified as 048659. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2214-B-U2-FCM-1 and welding being carried out against B-WR-7652.

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### Segment 1AE to 1AAE

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Deck Panel Transverse weld observed weld was being excavated at several locations due to UT rejected indication.

The weld joint is identified as OBE1-001. The welder is identified as 045196 and 058242. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-1G(1F)-Repair and welding being carried out against B-WR-7711.

### Segment 1AW to 1AAW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Deck Panel segment to segment transverse weld, weld being excavated at several locations due to UT reject indications. The weld joint is identified as OBW-1-001. The welder is identified as 220064. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231-1-U2a-F and welding being carried out against B-WR-7649.

### Segment 5BE and 5CE

This Quality Assurance (QA) Inspector observed between Segment 5BE and 5CE, Transverse segment flush grinding was in progress and UT rejected areas being excavated by grinding.

### Segment 5BW

This Quality Assurance (QA) Inspector observed at Segment 5BW at Lower Chevron Counter Weight side bolt snug tightening was in progress between PP 32, PP 33 and PP 34.

### Segment 5AE and 5BE

This Quality Assurance (QA) Inspector observed at Segment 5BE between PP 31 and PP 32 hold back fillet welded area grinding was in progress.

### Segment 5AE

This Quality Assurance (QA) Inspector observed at Segment 5AE at PP 29 and at PP 32 Lower Chevron Shim and bolt installation was in progress.

### Segment 5BE to 5CE

This Quality Assurance (QA) Inspector observed between Segments 5BE to 5CE Transverse weld for Deck Panel excavation was in progress for UT reject areas.

### Segment 5BE to 5CE

This Quality Assurance (QA) Inspector observed between Segments 5BE to 5CE Longitudinal Diaphragm Cross

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Beam side heat straightening was in progress.

Segment 5BE to 5CE

This Quality Assurance (QA) Inspector observed between Segments 5BE to 5CE backing steel bar was being removed by carbon arc gouging for weld joint no. OBE5-001, OBE5-001 and OBE5-009.

Segment 1BE

This Quality Assurance (QA) Inspector observed segment 1BE at PP 12.5 MT for Hold Back area in progress by ABF QA at Bottom Panel.

Segment 1BE

This Quality Assurance (QA) Inspector observed segment 1BE at PP 12.5 Spot Welding was in progress at hold back areas for visual and MT discontinuity found locations at Side Panel.

Cantilever

This Quality Assurance (QA) Inspector observed at Cantilever BK003-001-3GK grinding in progress for welding for backing bar fillet welded areas.

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.

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<b>Inspected By:</b>	Math,Manjunath	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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