

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-021182**Date Inspected:** 22-Jul-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:** Zhu Zhong Hai  
**Inspected CWI report:** Yes No N/A  
**Electrode to specification:** Yes No N/A  
**Qualified Welders:** Yes No N/A  
**Approved Drawings:** Yes No N/A

**CWI Present:** Yes No  
**Rod Oven in Use:** Yes No N/A  
**Weld Procedures Followed:** Yes No N/A  
**Verified Joint Fit-up:** Yes No N/A  
**Approved WPS:** Yes No N/A  
**Delayed / Cancelled:** Yes No N/A

**Bridge No:** 34-0006**Component:** OBG Segment Assembly**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Ramesh Gade, was present during the times noted above for observations relative to the work being performed.

This QA Inspector observed the following work in progress:

**OBG Segment 9BW-9CW**

Shielded Metal Arc Welding (SMAW) in the 4G position of EP to DP holdback weld of Counterweight side. Weld # 9BW-CA061-002 and 9CW-CA059-006. The welder is identified as 068097. ZPMC CWI is identified as Zhu Zhong Hai. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-TC-U4b-FCM-1.

**OBG Segment 9DW-FL3**

Flux Core Arc Welding (FCAW) in the 3F position of Half Diaphragm vertical web attached to PP080. The welder is identified as 045280. ZPMC Quality Control (QC) is identified as Xu Jin Long. The welding variables recorded by QC appeared to comply with WPS-B-P-2133.

**OBG Segment 9DE-9EE**

Shielded Metal Arc Welding (SMAW) in the 4G position of EP to SP holdback weld of Cross beam side. Weld #

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9DE-SEG056A-028 and 9EE-CA069-001. The welder is identified as 067942. ZPMC CWI is identified as Liu Huajie. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-TC-U4b-FCM-1.

OBG Segment 7BW-FL3

This QA inspector performed Magnetic Particle Testing (MT) approximately 15% of the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated an MT report for this date. The member is identified as 7BW – FL3 Damaged area of PP050 during loading. ZPMC notification # 06251, item # 1.

The weld designations reviewed are as follows:

FB019-008-128  
SSD10A-PP050-275  
BP025-008-054

OBG Segment 7BW-FL3

This QA inspector performed Ultrasonic Testing (UT) approximately 10% of the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated an UT report for this date. The member is identified as 7BW – FL3 Damaged area of PP050 during loading. ZPMC notification # 06251, item # 1.

The weld designations reviewed are as follows:

FB019-008-128  
SSD10A-PP050-275  
BP025-008-054

OBG Segment 9AW-9BW

This QA Inspector witnessed Magnetic Particle Testing (MT). All recordable Indications if found were recorded on a data sheet that Caltrans QA generates after performing a joint inspection. The members are identified as the 9AW-9BW BP to BP splice weld repaired area. ABF notification No: 07212010-2, Item # 1.

The weld designations reviewed are as follows:

OBW9B-003

OBG Segment 9AW-9BW

This QA Inspector performed verification Ultrasonic Testing (UT) in accordance with ABF/CT Pattern “D” UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a data sheet that Caltrans QA generates after performing a joint inspection. The members are identified as the 9AW-9BW BP to BP splice weld

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repaired area.

ABF notification No: 07212010-2, Item # 1.

The weld designations reviewed are as follows:

OBW9B-003

OBG Segment 9BE-9CE

This QA Inspector witnessed Magnetic Particle Testing (MT). All recordable Indications if found were recorded on a data sheet that Caltrans QA generates after performing a joint inspection. The members are identified as the 9BE-9CE BP to SP split weld repaired area.

ABF notification No: 07212010-2, Item # 2.

The weld designations reviewed are as follows:

SEG052A-045 and SEG054A-014

OBG Segment 9BE-9CE

This QA Inspector performed verification Ultrasonic Testing (UT) in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a data sheet that Caltrans QA generates after performing a joint inspection. The members are identified as the 9BE-9CE BP to SP split weld repaired area.

ABF notification No: 07212010-2, Item # 2.

The weld designations reviewed are as follows:

SEG052A-045 and SEG054A-014

OBG Segment 9BE-9CE

This QA inspector performed Ultrasonic Testing (UT) approximately 10% of the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated an MT report for this date. The member is identified as 9BE-9CE 'T' rib & 'I' rib splice weld.

ZPMC notification # 06254, item # 1.

The weld designations reviewed are as follows:

DP710-001-035

DP698-001-021

EP145-002-028

EP163-001-013

SP689-002-0056 and 060

SP544-002-051

SP624-002-002 and 011

SP373-001-050

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SP346-001-050

SP319-001-063 and 053

BP179-001-024

BP171-001-020 and 030

BP125-001-030

**Summary of Conversations:**

No relevant conversations reported on this date.

**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 (+86)15000 42 2372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Gade,Ramesh	Quality Assurance Inspector
<b>Reviewed By:</b>	McClendon,Timothy	QA Reviewer

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