

**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-018660**Date Inspected:** 18-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** ShangHai, China**CWI Name:** Tian Lei**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**Summary of Items Observed:**

Summary of Items Observed: On this date Caltrans OSM Quality Assurance(QA) Inspector, DJ Shin was present during the times noted above for observations relative to the work being performed.

## Bay 1

This QA Inspector observed the following work in progress for Bay 1.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Zhu Lin.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components: Barrier rail

PCMK: E2-SB7-003-063~074

Welder: 216575

WPS-B-T-2133

PCMK: E2-SB1C-011-063~074

Welder: 068916

WPS-B-T-2133

PCMK: E2-SB1-037-063~074

Welder: 215397

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WPS-B-T-2133

Bay 2

This QA Inspector observed the following work in progress for Bay 2.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Zhu Lin.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components: Floor Beam

PCMK: FB3343-001-330,325

Welder: 067888

WPS-B-T-2233-TC-U4C-F

PCMK: FB3343-001-318,313

Welder: 067877

WPS-B-T-2233-TC-U4C-F

PCMK: FB3343-001-311,307

Welder: 070140

WPS-B-T-2233-TC-U4C-F

PCMK: FB3343-001-300,295

Welder: 069683

WPS-B-T-2233-TC-U4C-F

PCMK: FB3343-001-216,211

Welder: 066763

WPS-B-T-2233-TC-U4C-F

PCMK: FB3343-001-204,199

Welder: 066674

WPS-B-T-2233-TC-U4C-F

PCMK: FB3343-001-193,188

Welder: 068859

WPS-B-T-2233-TC-U4C-F

PCMK: FB3343-001-181,176

Welder: 06673

WPS-B-T-2233-TC-U4C-F

Components: Segment Assembly

PCMK: SEG3020K-393

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Welder: 045209  
WPS-B-T-2233-TC-U5-F

PCMK: SEG3020K-197  
Welder: 062708  
WPS-B-T-2233-TC-U5-F

PCMK: SEG3020K-271,272  
Welder: 048696  
WPS-B-T-2232-3

PCMK: SEG3020K-401,402  
Welder: 045227  
WPS-B-T-2232-3

### Bay 3

This QA Inspector observed the following work in progress for Bay 3.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Wang Lian.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components: Segment Assembly

PCMK: SEG3019K-003  
Welder: 068206, 066359  
WPS-B-T-2233-TC-U5-F

Heat straightening of PCMK, LD3041B-001, under approved Heat Straightening procedure, HSR (B)-435, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Zhu Jun. The approved HSR procedure stated that a maximum temperature of 600°C, with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 25mm.

### Bay 11

This QA inspector performed Ultrasonic Testing (UT) of approximately 10 % of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member(s) is/are identified as follows; BK004A3-022, BK004A5-022, BK005A1-003, Item number 2, 3, of NWIT tracker document # 07409,

Trial Assembly

This QA inspector performed Ultrasonic Testing (UT) of approximately 10 % of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member(s) is/are identified as follows; SEG071B-043, SEG071C-043, Item number 1 of NWIT tracker document # 07409,

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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 Tsang 15000422372, who represents the Office of Structural Materials for your project.

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

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