

**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-018649**Date Inspected:** 20-Sep-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:** Chen Xi**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 Xiang Feng Feng.

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-SB1-033-126~132

Welder: 215082

WPS-B-T-2132-3

**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 Xiang Feng Feng.

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.

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Components: Barrier Rail  
PCMK: E5-SB1-025-026~031  
Welder: 043221  
WPS-B-T-2132-3

PCMK: E5-SB1-040-026~031  
Welder: 201583  
WPS-B-T-2132-3

Components: Floor Beam  
PCMK: FB3343-001-091  
Welder: 045207  
WPS-B-T-2233-TC-U5-F

PCMK: FB3343-001-153  
Welder: 045240  
WPS-B-T-2233-TC-U5-F

### 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 Tian Lei.

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: LD 3041-001-199,200  
Welder: 217805  
WPS-B-T-2132-3

PCMK: LD 3041-001-138~145  
Welder: 206625  
WPS-B-T-2233-TC-U4b-F

Heat straightening of PCMK, FB3260 under approved Heat Straightening procedure, HSR 1(B)-9523, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Tian Lei. 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 13mm.

### Bay 6

This QA Inspector observed the following work in progress for Bay 6.

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

ZPMC QC is identified as Zheng Zhi Wei.

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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: Cross Beam  
PCMK: CB3003K-001-035,036  
Welder: 052447  
WPS-B-T-2132-3

PCMK: CB3003L-018-128  
Welder: 053609  
WPS-B-T-2333-TC-P5-F

PCMK: CB3003L-018-165  
Welder: 057246  
WPS-B-T-2333-TC-P5-F

This QA Inspector observed the following work in progress for Bay 6.  
ZPMC was using the Shield Metal Arc Welding (SMAW) process.  
ZPMC QC is identified as Zheng Zhi Wei.  
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: Cross beam  
PCMK: X3723  
Welder: 053753  
Report: B-CWR1997  
WPS-345-SMAW-1G (1F)-Repair

Bay 7

This QA Inspector observed the following work in progress for Bay 7.  
ZPMC was using the Flux Core Arc Welding (FCAW) process.  
ZPMC QC is identified as Shu Yang Hua.  
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: W2-SB9-007-100~105  
Welder: 215689  
WPS-B-T-2132-3

PCMK: W2-SB9-017-126~131  
Welder: 048625  
WPS-B-T-2132-3

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PCMK: W2-SB9-015-132~161

Welder: 057795

WPS-B-T-2133

PCMK: DP3168-001-127

Welder: 204342

WPS-B-T-2132-TC-U4b-F

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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**Inspected By:** Shin,DJ

Quality Assurance Inspector

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**Reviewed By:** Carreon,Albert

QA Reviewer