

**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-022893**Date Inspected:** 23-Apr-2011**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:** Sha Zhi**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 10

This QA Inspector observed the following work in progress for Bay 10.

ZPMC was using the Shield Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Zhu 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: Lateral Bracket

PCMK: X3305K-014-002

Welder: 052930

WPS-B-P-2213-TC-U4b

PCMK: X3305K-007-001

Welder: 040581

WPS-B-P-2213-TC-U4b

PCMK: X3305K-036-001

Welder: 057220

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WPS-B-P-2211-TC-U4b

PCMK: X3305K-037-001, 002

Welder: 040582

WPS-B-P-2211-TC-U4b

PCMK: X3305K-038-001,002

Welder: 053829

WPS-B-P-2211-TC-U4b

This QA Inspector observed the following work in progress for Bay 10.

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

ZPMC QC is identified as Zhu Feng.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specifications (WPS). Listed below are the locations that were identified by this QA inspector.

Components: Lateral Bracket

PCMK: X3305K-033-001,002

Welder: 054117

WPS-B-T-2231-ESAB

Components: Bike Path

PCMK: BK009A3-001-106,105

Welder: 054069

WPS-B-T-2232-ESAB

WPS-B-T-2233-ESAB

Heat straightening of PCMK, BK014A, under approved Heat Straightening procedure, HSR 1 (B)-10313, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Zhu Feng. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 18mm.

Bay 11

This QA Inspector observed the following work in progress for Bay 11.

ZPMC was using the Shield Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Wang Chuang Xin.

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: Traveler rail

PCMK: 30TR2-TR30B

Welder: 202354

Report: B-WR16935

WPS-345-SMAW-2G (2F)-Repair

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PCMK: 28TR1-002-025,026

Welder: 202354

WPS-B-P-2112

PCMK: 35TR1-001-025,026

Welder: 202354

WPS-B-P-2112

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; Traveler Rail on item number 12~34, of NWIT tracker document # 08911,

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:** Riley,Ken

QA Reviewer