

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-018644**Date Inspected:** 13-Oct-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 Ai 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: Barrier Rail

PCMK: E2-SB1D-008-027,028

Welder: 216872

WPS-B-T-2132-3

PCMK: E2-SB7-008-027,028

Welder: 059450

WPS-B-T-2132-3

Heat straightening of PCMK, 20TR-034,047, PP-100 under approved Heat Straightening procedure, HSR (B)-362, HSR1 (B)-9262,. The in process temperature was at the time of this observation witnessed at less than 600°C. The

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ZPMC QC was identified as Ai Wei. 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 80mm.

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 Ai 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: Barrier Rail

PCMK: E5-SB1-043-027,028

Welder: 045203

WPS-B-T-2132-3

PCMK: E5-SB1-049-027,028

Welder: 045175

WPS-B-T-2132-3

Components: Floor Beam

PCMK: FB3327-001-001

Welder: 045276

Report: B-WR15956

WPS-345-FCAW-2G (2F)-Repair-1

PCMK: FB3327-001-001

Welder: 045240

Report: B-WR15923

WPS-345-FCAW-2G (2F)-Repair-1

This QA inspector performed Magnetic Particle Testing (MT) and Visual Inspection (VT) of approximately 15 % of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as follows; FB3341-001-009,010,011,012,051,058, FB3344-001-031,032,040,041 for item number 1 and 2 on NWIT tracker document # 06943.

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 Liu Fa Wen.

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

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PCMK: CB3002A-018-027

Welder: 053742, 053609, 21718

WPS-B-T-2232-TC-U5-F

Components: Floor Beam

PCMK: FB3168-001-039

Welder: 215083

WPS-B-T-P-2213-B-U3b-F

ZPMC has excess Air Arc Gouging on LD3048-001-007, Plate thickness is 35mm gouge depth was 27mm without approved CWR weld repair. ZPMC CWI state that ZPMC will submit CWR document prior to start repair welding.

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 Liu Wang Liang.

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-SB9-001-106,108

Welder: 062447

WPS-B-T-2132-3

PCMK: W2-SB9-005-106,108

Welder: 048625

WPS-B-T-2132-3

PCMK: W2-SB9-005-106,108

Welder: 215689

WPS-B-T-2132-3

This QA Inspector observed the following work in progress for Bay 7.

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

ZPMC QC is identified as Wang Liang.

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: X4253B-005-001

Welder: 057795

Report: B-CWR-2036

WPS-345-SMAW-1G (1F)-FCM-Repair

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PCMK: X4253B-008-001

Welder: 053753

Report: B-CWR-2039

WPS-345-SMAW-1G (1F)-FCM-Repair

PCMK: X4253B-001-001

Welder: 048659

Report: B-CWR-2039

WPS-345-SMAW-1G (1F)-FCM-Repair

This QA Inspector observed the following work in progress for Bay 7.

ZPMC was using the Submerged Arc Welding (SAW) process.

ZPMC QC is identified as Wang Liang.

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.

PCMK: Cross Beam

PCMK: CB3003B-019-006

Welder: 053748

WPS-B-T-2221-B-L2C-S-2

Heat straightening of PCMK, W2-SB9-10, 11, 12, 13 under approved Heat Straightening procedure, HSR1 (B)-9562,. The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Ai Wei. 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 8mm.

OBG Trial Assembly

This QA inspector performed Magnetic Particle Testing (MT) and Visual Inspection (VT) of approximately 15 % of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as follows; TR5B-PP003, TR5B-PP094-003 for item number 1 on NWIT tracker document # 06941, LB4-001-044, LB4A-001-006 for item number 1 on NWIT tracker document # 06942, DP-715-001-19, DP-702-001-41 for item number 9 on NWIT tracker document # 06944

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

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your project.

Inspected By:	Shin,DJ	Quality Assurance Inspector
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Reviewed By:	Carreon,Albert	QA Reviewer
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