

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-018640**Date Inspected:** 09-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:** 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 Zhang Ya Xu.

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-SB4-003-051,052

Welder: 059450

WPS-B-T-2132-3

PCMK: E2-SB4-004-020,021

Welder: 215082

WPS-B-T-2132-3

PCMK: E2-SB1D-024-020,021

Welder: 216575

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WPS-B-T-2132-3

PCMK: E2-SB1-040-020,021

Welder: 215397

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 Zhang Ya Xu.

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: FB3343-001-215

Welder: 068850

WPS-B-T-2233-TC-U5-F

PCMK: FB3343-001-284

Welder: 067877

WPS-B-T-2233-TC-U5-F

PCMK: FB3343-001-316

Welder: 066912

WPS-B-T-2233-TC-U5-F

PCMK: FB3343-001-268

Welder: 067520

WPS-B-T-2233-TC-U5-F

PCMK: FB3343-001-257

Welder: 066239

WPS-B-T-2233-TC-U5-F

PCMK: FB3343-001-338

Welder: 070006

WPS-B-T-2233-TC-U5-F

PCMK: FB3343-001-316

Welder: 066763

WPS-B-T-2233-TC-U5-F

Components: Longitudinal Diaphragm

PCMK: LD3048-001-043,044

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Welder: 045207

WPS-B-T-2232-TC-U4b-F

PCMK: LD3049-001-289,290

Welder: 048696

WPS-B-T-2232-TC-U4b-F

Components: Anchor Plate

PCMK: AP3032-001-660,661

Welder: 062708

WPS-B-T-2233-TC-U4b-F/ WPS-B-T-2233-TC-P4-F

PCMK: AP3032-001-670,671

Welder: 045227

WPS-B-T-2233-TC-U4b-F/ WPS-B-T-2233-TC-P4-F

PCMK: AP3032-001-816,817

Welder: 045228

WPS-B-T-2233-TC-U4b-F/ WPS-B-T-2233-TC-P4-F

PCMK: AP3032-001-950,951

Welder: 207465

WPS-B-T-2233-TC-U4b-F/ WPS-B-T-2233-TC-P4-F

Heat straightening of PCMK, SA3334-001, under approved Heat Straightening procedure, HSR 1(B)-9812, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Zhang Ya Xu. 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 10mm.

Heat straightening of PCMK, SA3014-001, under approved Heat Straightening procedure, HSR 1(B)-9808, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Zhang Ya Xu. 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.

QA Inspector has issued Incidental reports for wide root opening and SMAW welding process With 11.5mm root opening on FB3343-001-064, ZPMC approve welding procedure specification WPS-B-T-2233-TC-U4b-F state that welding process should be FCAW process with root opening 5mm Maximum, QA inspector generated TL-15 on this date.

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 Zhang Ya Xu.

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

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

Components: Longitudinal Diaphragm

PCMK: LD3040-001-035

Welder: 206623

Report: B-CWR 2179

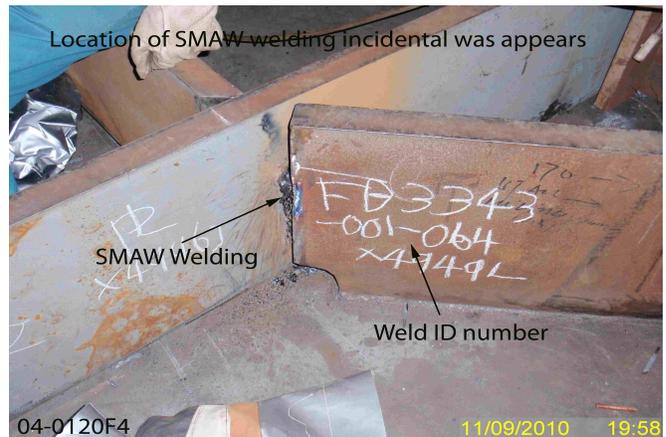
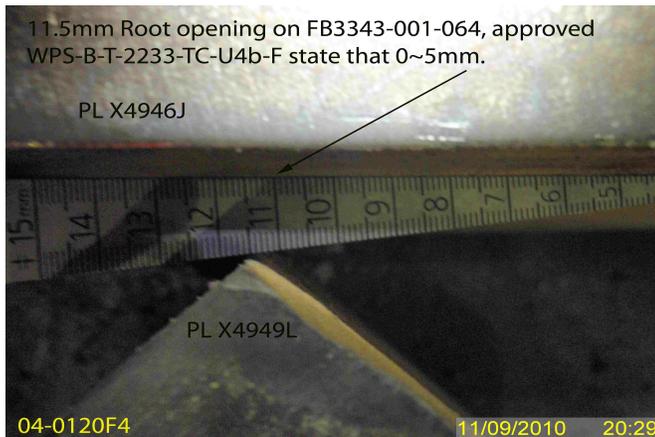
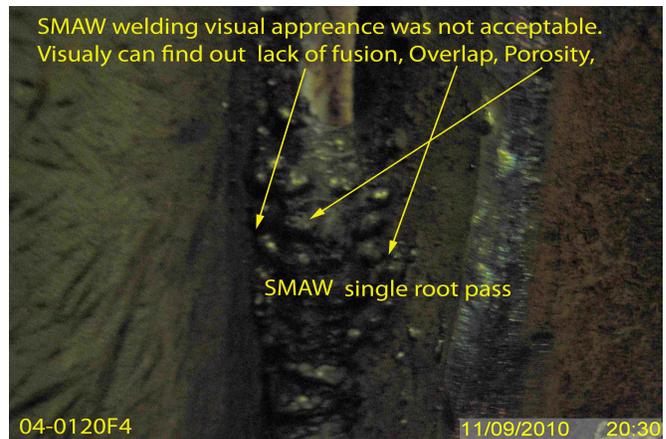
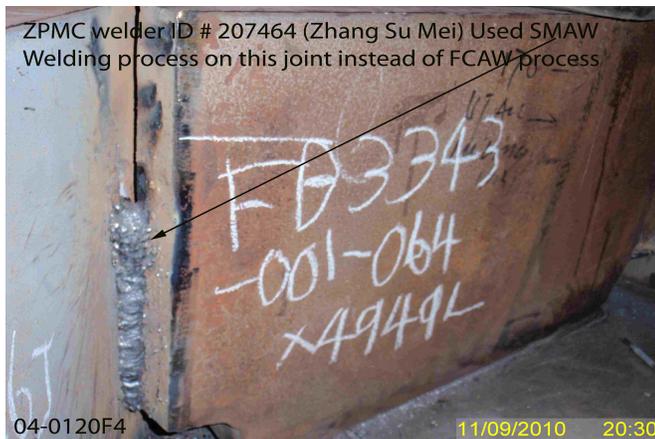
WPS-345-FCAW-2G (2F)-FCM-Repair

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; FB3286-001-123, for item number 3 of NWIT tracker document # 07292

Bay 7

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; CB3003E-019-003, for item number 1 of NWIT tracker document # 07292

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



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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.

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