

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-017826**Date Inspected:** 26-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:** Xu Xian Ping**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

Heat straightening of PCMK, E20TR2-038 under approved Heat Straightening procedure, HSR1 (B)-362. The in process temperature at the time of this observation was witnessed as 500°C. The ZPMC QC was identified Xiang Feng Feng. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 numbers of applications was allowed. The distortion that was previously measured and recorded on the HSR was Maximum 80mm.

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

ZPMC was using the Flux Cored 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.

Component; Barrier Rail

PCMK: E2-SB11-001

Welder: 216872

WPS-B-T-2132-3

WELDING INSPECTION REPORT

(Continued Page 2 of 5)

PCMK: E2-SB5-014

Welder: 059450

WPS-B-T-2132-3

PCMK: E2-SB5-008

Welder: 215397

WPS-B-T-2231-B-U2-F

Bay 2

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

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

ZPMC QC is identified as Zhu Jun.

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-SB10-005

Welder: 215676

WPS-B-T-2132-3

PCMK: E5-SB1-048

Welder: 045240

WPS-B-T-2132-3

PCMK: E5-SB1B-003

Welder: 207465

WPS-B-T-2132-3

PCMK: FB3317-001-039

Welder: 045209

WPS-B-T-2132-3

PCMK: E5-SB1C-003

Welder: 045203

WPS-B-T-2231-B-U2-F

ZPMC was performing Heat straightening of PCMK, E5-SB1C-001 and E5-SB1-008 under approved Heat Straightening procedure, HSR1 (B)-9412 and 9440. The in process temperature at the time of this observation was 300°C. The ZPMC QC was identified as Xiang Feng Feng. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 numbers of applications was allowed. The distortion that was previously measured and recorded on the HSR was Maximum 6mm.

Bay 4

This QA Inspector observed the following work in progress for Bay 4. Submerged Arc Welding (SAW) welding

WELDING INSPECTION REPORT

(Continued Page 3 of 5)

of weld joint 004 located on PCMK CB3002C-018. Welder was identified as 054458. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with WPS-B-T-2221-B-L2C-S-2.

This QA Inspector observed the following work in progress for Bay 4.

ZPMC was using the Flux Cored 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.

Component; Bottom Plate

PCMK: BP3083-001

Welder: 055564

WPS-B-T-2132-3

PCMK: BP3079-001

Welder: 044830

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

Bay 6

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

ZPMC was using the Flux Cored 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.

Component; West Jacking Frame

PCMK: WJF-0-051

Welder: 215083

WPS-B-T-3311-TC-P4

Bay 7

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

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

ZPMC QC is identified as Cui Jun Jie.

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.

This QA Inspector during a random observation in Bay 7 observed Flux Cored Arc Welding (FCAW) welding in progress. ZPMC QC is identified as who was documenting the welding in process, which appeared to comply with the WPS-B-T-2132-3. Listed below are the locations that were identified by this QA inspector.

Component; Barrier Rail

PCMK: W2-SB1H-001-126~131

Welder: 215689

WELDING INSPECTION REPORT

(Continued Page 4 of 5)

WPS-B-T-2132-3

PCMK: W2-SB1-001-082~087

Welder: 048625

WPS-B-T-2132-3

PCMK: W2-SB1G-018-126~131

Welder: 053742

WPS-B-T-2132-3

Component; CB18 Tie down

PCMK: SA3077-008-001

Welder: 217185

WPS-B-T-2331-P2-F-2

PCMK: SA3077-010-001

Welder: 051246

WPS-B-T-2331-P2-F-2

Component; Side Plate

PCMK: SP3150-001-015,016

Welder: 062447

WPS-B-T-2132-3

This QA Inspector during a random observation in Bay 8 observed ZPMC using the Shield Metal Arc Welding (SMAW) process for repair welding of weld joint 002 located on PCMK SA-3078-003, under report number B-CWR-1944. The area being repaired was rejected by ZPMC UT technicians. The ZPMC Welder was identified as 049769. ZPMC QC was identified as Cui Jun Jie. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-repair-1.

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

WELDING INSPECTION REPORT

(Continued Page 5 of 5)



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

Reviewed By: Carreon,Albert

QA Reviewer