

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-023276**Date Inspected:** 06-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**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:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Kelly Leavitt, was present during the times noted above for random observations relative to the work being performed.

Trial Assembly

This QA Inspector observed the following work in progress for Trial Assembly.

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

ZPMC QC is identified as Zhan Hal Fang and An Qing Ziang.

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; OBG 14E PP126.5

PCMK: SEG3019P

Weld No: 197,202,207,212

Welder: 215553

Weld Repair No. B-WR20247

WPS-345-SMAW-3G(3F)-FCM-Repair-1

Components; OBG 14 E

PCMK: SEG3019AA

Weld No: 003,014

Welder: 066733

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

Weld Repair No. B-WR20923
WPS-345-SMAW-2G(2F)-FCM-Repair-1

Components; OBG 14 E
PCMK: SEG3019AW
Weld No: 118,122,128,133,138,163,168
Welder: 066779, 066779
Weld Repair No. B-WR20791
WPS-345-SMAW-1G(1F)-FCM-Repair-1

Components; OBG 14E
PCMK: SEG3019AX
Weld No: 010,032
Welder: 044779
Weld Repair No. B-WR20875
WPS-345-SMAW-4G(4F)-FCM-Repair-1

This QA Inspector observed the following work in progress for Trial Assembly.
ZPMC was using the Shielded Metal Arc Welding (SMAW) process.
ZPMC QC is identified as Shi 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; OBG 14W
PCMK: CB19 to 14W
Weld No: Temporary Attachments
Welder: 203204
WPS-B-P-2112

Components; OBG 14W
PCMK: 13CW to 14W
Weld No: Temporary Attachments
Welder: 215676
WPS-B-P-2112

This QA Inspector observed the following work in progress for Trial Assembly.
ZPMC was using the Flux Core Arc Welding (FCAW) process.
ZPMC QC is identified as Zhan Hal Fang and An Qing Ziang.
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; OBG 13BE
PCMK: SA3013A
Weld No: 203,217,233

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

Welder: 050977
WPS-B-T-2232-ESAB

Components; OBG 13AE
PCMK: SEG3007V
Weld No: 253
Welder: 050242
WPS-B-T-2232-ESAB

Components; OBG 13BE
PCMK: SEG3009H
Weld No: 008
Welder: 052686
WPS-B-T-2231-ESAB

Components; OBG 13BE to 13CE
PCMK: SEG3009A
Weld No: 001
Welder: 055569
WPS-B-T-2232-ESAB

Components; OBG 13BE to 13CE
PCMK: OBE13D (see photos)
Weld No: 001
Welder: 055481
WPS-B-T-2233-ESAB

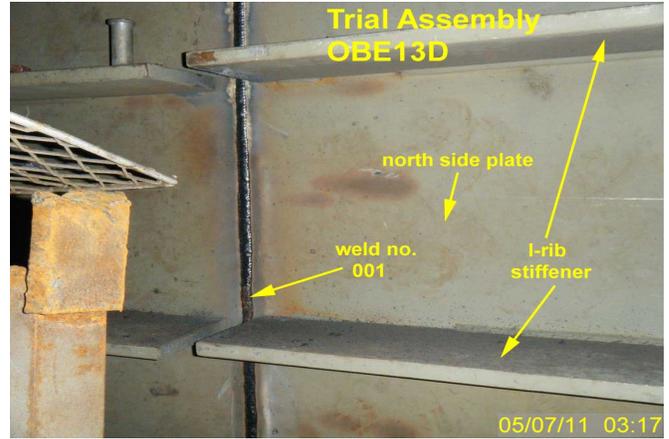
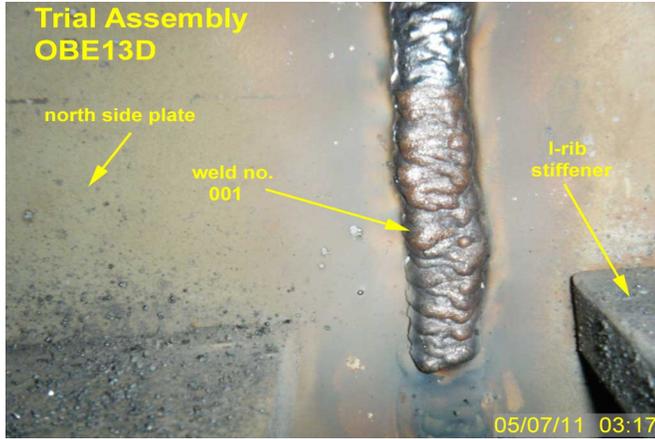
ZPMC was observed in Trial Assembly, using Shielded Metal Arc Welding (SMAW), to repair weld joints in 13BE Panel Point 122, I-ribs to Floor Beams. The areas being repaired were Visual Tested (VT) rejects previously marked by ZPMC's Quality Control (QC) personal. ZPMC's welders making the repairs was identified as 058102 and 044760. ZPMC's QC personal was identified as Zhan Hal Fang. Pre heat was being applied to the weld area and it appeared repairs that were being made comply with contract documents.

Heat straightening of PCMK: LD3041A under approved Heat Straightening procedure, HSR1 (B)-10321. The in process temperature was observed as 420°C. The ZPMC QC was identified as Shen Jian Bo. 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 30mm.

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

WELDING INSPECTION REPORT

(Continued Page 4 of 4)



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 James Devey 1500026784, who represents the Office of Structural Materials for your project.

Inspected By: Leavitt, Kelly

Quality Assurance Inspector

Reviewed By: Riley, Ken

QA Reviewer