

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008738**Date Inspected:** 24-Aug-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Xu Xian Ping
Inspected CWI report: Yes No N/A
Electrode to specification: Yes No N/A
Qualified Welders: Yes No N/A
Approved Drawings: Yes No N/A

CWI Present: Yes No
Rod Oven in Use: Yes No N/A
Weld Procedures Followed: Yes No N/A
Verified Joint Fit-up: Yes No N/A
Approved WPS: Yes No N/A
Delayed / Cancelled: Yes No N/A

Bridge No: 34-0006**Component:** OBG & TOWER Components**Summary of Items Observed:**

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

BAY 6**Ultrasonic Testing**

This QA inspector performed 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 members are identified as OBG Components. The weld designations reviewed are as follows:

1. SP3057 – 001 – 056; 054
2. SP3056 – 001 – 080; 081; 003; 061

Magnetic Particle Testing

This QA inspector performed MT 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 members are identified as OBG Components. The weld designations reviewed are as follows:

1. SP3056 – 001 – 027~056; 074~079; 087~092
2. SP3016 – 001 – 001~010
3. SP3053 – 001 – 001~008
4. SP3038 – 001 – 001~010

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

5. SP3042 – 001 – 042~051

This QA Inspector observed the following work in progress:

SMAW process welding of weld joint #1B located on WD1 – A305 – 77M – 4. Welder is identified as 066456. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3212 – Tc – U5b – 1.

SMAW process welding of weld joint #1A located on WD1 – A305 – 77M – 1. Welder is identified as 037780. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3212 – Tc – U5b – 1.

SMAW process welding of weld joint #7A located on WD1 – A305 – 77M – 4. Welder is identified as 066481. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3212 – Tc – U5b – 1.

SMAW process welding of weld joint #7B located on WD1 – A305 – 77M – 1. Welder is identified as 066457. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3212 – Tc – U5b – 1.

SMAW process welding of weld joint #9A located on WD1 – A305 – 77M – 2. Welder is identified as 066456. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2212 – Tc – U5b.

This QA Inspector observed the following work not in compliance:

During random verification Magnetic Particle Testing (MT) of the OBG Side Plates located in Bay # 6, observed a total of Twelve (12) transverse linear indications. The indication lengths measured approximately 4mm to 10mm in length. The Side Plates are identified as SP3042-001 and SP3053-001.

The affected weld designations are as follows:

SP3042-001-021 - Six (6) Transverse linear indications

SP3042-001-019 - One (1) Transverse linear indication

SP3042-001-018 - Three (3) Transverse linear indications

SP3053-001-009 - Two (2) Transverse linear indications

The above mentioned Side Plates had been welded on the gantry with automatic FCAW by electrode Super cored 71H (1.4 diameter) (E71T-1) using WPS-B-T-2132-3.

These areas are outside of the 25% area tested by ZPMC Quality Control personnel.

For Further details please see the incident report: - 040120F4_TL-15_B227_08-24-09_ (MT) Transverse Indications.

BAY 7

Ultrasonic Testing

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

This QA inspector performed 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 members are identified as OBG Components. The weld designations reviewed are as follows:

1. SP3026 – 017 – 026; 060

Magnetic Particle Testing

This QA inspector performed MT 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 members are identified as OBG Components. The weld designations reviewed are as follows:

1. DP3039 – 001 – 009; 011
2. DP3001 – 001 – 010

This QA Inspector observed the following work in progress:

SMAW process welding of weld joint #004 located on Bottom Plate BP3015 – 017. Welder is identified as 203206. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2112.

SMAW process welding of weld joint #003 located on Side Plate SP3032 – 017. Welder is identified as 203204. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2112.

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.

Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Prue,Erik	QA Reviewer
