

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-007585**Date Inspected:** 03-Jul-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**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	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 and 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 2

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #012 located on Longitudinal Diaphragm LD013-013. Welder is identified as 203871. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – Tc – U4b – F.

FCAW process welding of weld joint #008 located on Longitudinal Diaphragm LD011-019. Welder is identified as 062438. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133.

FCAW process welding of weld joint #011 located on Longitudinal Diaphragm LD014-013. Welder is identified as 045209. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

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. FB028 – 009 – 058 ~ 062; 089; 090; 099; 109; 110; 115
2. FB024 – 008 – 058 ~ 062; 086; 087; 120; 121
3. FB010 – 031 – 013; 014; 021; 022; 047; 048
4. FB003 – 168 – 011; 012; 023; 024
5. FB003 – 167 – 011; 012; 023; 024
6. FB003 – 172 – 011; 012; 023; 024

Green Tags

The following green tags issued for OBG components after completing the NDT requirements are:

1. SSD17/17A – PP093 – (FB003 – 172; FB006 – 160; FB014 – 037) – Green Tag # 009564
2. SSD18/18A – PP094 – (FB003 – 167; FB006 – 176; FB014 – 039) – Green Tag # 009565

BAY 3

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #127 located on Floor Beam FB028 – 011. Welder is identified as 044824. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4b – F.

FCAW process welding of weld joint #112 located on Floor Beam FB019 – 009. Welder is identified as 066746. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4b – F.

This QA Inspector observed the following work not in compliance:

During Quality Assurance (QA) random visual inspection on OBG Longitudinal Diaphragm (LD002 – 027 – 012) at BAY # 03, observed that ZPMC performed welding without repairing (surface preparation) the base metal notch at the edge exceeding 4mm deep. Welded by welder # 204338, using WPS # WPS – B – T – 2331 – TC – P4 – F.

For Further details please see the incident report: - 040120F4_TL015_B227_07-03-09_Preparation of Base metal.

BAY 5

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #007 located on Traveler Rail TR1D – PP45. Welder is identified as 205390. ZPMC QC is identified as Xu Hong Min. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – Tc – U4c – F – 1.

SMAW process Tack welding of weld joint #066 located on Bike Path BK001 – 023. Welder is identified as 215169. ZPMC QC is identified as Xu Hong Min. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2112.

BAY 6

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

This QA Inspector observed the following work in progress:

SAW process welding of weld joint #001 located on Cross Beam CB202F – 009. Welder is identified as 046830. ZPMC QC is identified as Liu Chuan Gang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2221 – B – L2c – S – 2.

SMAW process welding of weld joint #04 located on NSD1 – DPSA4 – 02B/B. Welder is identified as 037779. ZPMC QC is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3312 – Tc – P5.

SMAW process welding of weld joint #05 located on NSD1 – DPSA4 – 02B/B. Welder is identified as 066028. ZPMC QC is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3312 – Tc – P5.

SAW process welding of weld joint #12 – 1A located on ND1 – SA658 – 53M. Welder is identified as 054458. ZPMC QC is identified as Shi Yu. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3221 – TC – U5 – S – 1.

SMAW process welding of weld joint #07 located on NSD1 – DPSA4 – 19B/B. Welder is identified as 069493. ZPMC QC is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3312 – Tc – P5.

SMAW process welding of weld joint #47 located on WD1 – A305 – 53M – 4. Welder is identified as 069894. ZPMC QC is identified as Shi Yu. The welding variables recorded by QC appeared to comply with the WPS – B – T – 4113 – 1.

SMAW process welding of weld joint #06 located on NSD1 – DPSA4 – 19B/B. Welder is identified as 037779. ZPMC QC is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3312 – Tc – P5.

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 member is identified as OBG Component. The weld designations reviewed are as follows:

1. SP3046 – 001 – 079 – Green Tag # 009424
2. SP3048 – 001 – 079; 083

BAY 7

This QA Inspector observed the following work in progress:

SMAW process welding of weld joint #007 located on BP3005 – 001. Welder is identified as 062300. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2112.

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

FCAW process Tack welding of weld joint #115 located on BP3002 – 001. Welder is identified as 220061. ZPMC QC (CWI) is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – B – U2 – F.

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
