

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-010227**Date Inspected:** 12-Nov-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:** Wu Zhi Cheng**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 day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Assembly Yard

1AW

SMAW repair welding on weld joint 001 located at CA106 edge to deck plate (exterior on cross beam).

Welder is identified as Mr. Yun Chengxian (045138). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and CWR repair procedure #896.

Y Locations of excavations by above noted welder (045138) are located at approximately 5900 and 6190mm.

SMAW repair welding on weld joint 004 located at CA106 edge to deck plate (exterior on cross beam).

Welder is identified as Mr. Zang Yanbo (045196). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and CWR repair procedure #896.

Y Locations of excavations by above noted welder (045196) are located at approximately 6980~7385mm and

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

14980~14850mm.

1AE

SMAW repair welding on weld joint 004 located at CA097 edge to deck plate (exterior on cross beam).

Welder is identified as Mr. Wu Haijun (201087). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and CWR repair procedure #882.

Y Locations of excavations by above noted welder (201087) are located at approximately 18865~19070mm.

2AE

SMAW repair welding on weld joint 007 located at SEG010A on cross beam of segment.

Welder is identified as Mr. Qie Jianzhou (201087). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1.

1BW+1AW

SMAW repair welding on weld joint 008 located at OBW1A bottom plate. (Weld sample was removed by ABF at this location). Welder is identified as Mr. Bishi Jun (068674). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1 and repair procedure ZP06-787-116.

1AE+1AAE

SMAW repair welding on weld joint 003 located at OBE1A bottom plate.

Welder is identified as Mr. Zang Yanbo (045196). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-4G (4F)-FCM-Repair-1 and CWR repair procedure #868 Rev 1.

NDT Observation

This QA Inspector observed ZPMC Magnetic Particle (MT) Technician performing MT on various locations in the trial assembly yard. Locations are as followed:

1AW

1. Excavation areas on deck plate of segment. Y locations of excavations and numbers of MT Indications observed are as followed:

Y locations are 5309mm (1 MT transverse indication observed), 4390mm (1 MT transverse indication observed), 3760mm (6 MT transverse indications observed), 2900mm (2 MT transverse indications observed) and 2380~2420mm (2 MT transverse indications observed).

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Miscellaneous Work In Progress

QA Inspector observed ZPMC's personnel performing various job functions in the trial assembly yard. Locations and description of work are as followed:

UT reject excavation was performed at deck plate to edge plate weld joint on segment 1W cross beam side of segment. Y locations and transverse, slag and porosity indications (observed by visual) are as followed at time of observation:

1. Y location 23280mm (slag), 21350~21440mm (4 transverse indications), 16550mm (4 transverse indications), 16310mm (1 transverse and linear indication), 15670mm (1 transverse indication), 14920mm (1 transverse indication), 14520mm (porosity) and 12515mm (2 transverse indications).

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

Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

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 (134-8257-0045), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer
