

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009763**Date Inspected:** 13-Oct-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 Yumin and Li Jia**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 + 1AAW

FCAW build up welding performed on deck plate stiffeners located on the cross beam side of segment.

Welder is identified as Mr. Cao Caijun (220064). ZPMC QC is identified as Xu Yumin.

The welding variables recorded by QC appeared to comply with WPS-345-FCAW-4G (4F)-Repair and CWR778.

FCAW build up welding performed on deck plate stiffeners located on the cross beam side of segment.

Welder is identified as Mr. Li Guimin (220069). ZPMC QC is identified as Xu Yumin.

The welding variables recorded by QC appeared to comply with WPS-345-FCAW-4G (4F)-Repair and CWR778.

FCAW build up welding performed on deck plate stiffeners located on the cross beam side of segment.

Welder is identified as Mr. Zhou Pan (220063). ZPMC QC is identified as Xu Yumin.

The welding variables recorded by QC appeared to comply with WPS-345-FCAW-4G (4F)-Repair and CWR778.

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For further information of weld buildup work in progress of above noted stiffeners, please refer to repair procedure CWR778 (Rev 1) and RFI 1904.

SAW welding performed on weld joint 001 located on OBE1.

Welder is identified as Mr. Jiang Jingteng (220063). ZPMC QC is identified as Xu Yumin.

The welding variables recorded by QC appeared to comply with WPS-345-SAW-1G (1F)-Repair-1 and CWR829.

SMAW welding of weld joint 011 located on DP734-001 bike side of segment.

Welder is identified as Mr. Zang Yanbo (045196). ZPMC QC is identified as Li Jia.

The welding variables recorded by QC appeared to comply with WPS-485-FCAW-3G (3F)-Repair and repair procedure WR8118.

1AW

SMAW welding performed on missdrilled hole located 3920mm off weld OBW1A-003 and 700mm off cross beam edge. Welder is identified as Mr. Chen Zhenghua (220067). ZPMC QC is identified as Xu Yumin. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-4G (4F)-Repair and CWR816.

SMAW welding performed on missdrilled hole located 3015mm off weld OBW1A-003 and 700mm off cross beam edge. Welder is identified as Mr. Chen Zhenghua (220067). ZPMC QC is identified as Xu Yumin. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-4G (4F)-Repair and CWR816.

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:

1. Uncertified ZPMC QC personnel performed MT on weld joint OBW1A-007 (excavation area) at bike path side of segment 1AW & 1BW. During the inspection performed by QC personnel, a transverse crack was noted at Y location 2620mm off bottom plate to side plate weld joint.
2. Excavation was performed on weld joint OBW2A-003 (interior) at three locations. Y locations are as followed: 4110mm off bike path side (center of excavation) and 830mm in length, 5420mm off bike path side (center of excavation) and 145mm in length and 7050mm off bike path side (center of excavation) and 1900mm in length.

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:

1. Segment 1E was moved next to 1E segment behind tower bay 10.

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

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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:	Carreon,Albert	QA Reviewer
