

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-011812**Date Inspected:** 05-Feb-2010**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

5CW

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 001 located at CA022 cross beam side of segment. Welder is identified as Mr. Li Wenguo (066261). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and WR10648 repair procedure.

Y Location of repair by above noted welder (066261) is located at 200~300mm.

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 005 located at CA021 counter weight side of segment. Welder is identified as Mr. Niu Duojun (037932). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and WR10647 repair procedure.

Y Location of repair by above noted welder (066261) is located at 180 and 250mm.

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6AW+6BW

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 001 located at OBE6 edge plate weld splice on counter weight side of segment. Welder is identified as Mr. Li Zhengxu (066179). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-3G (3F)-FCM-Repair-1 and WR1040 R2.

Y Location of repair by above noted welder (066179) is located at 200mm.

6BE

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 006 located at CA028 bike path side of segment. Welder is identified as Mr. Hu Yacheng (049339). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-4G (4F)-FCM-Repair-1 and CWR1137 R1.

Y Location of repair by above noted welder (049339) is located at 1405 and 1617mm.

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 004 located at CA028 bike path side of segment. Welder is identified as Mr. Sun Lingling (048047). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-4G (4F)-FCM-Repair-1 and CWR1137 R1.

Y Location of repair by above noted welder (048047) is located at 3192~3252mm.

6AE

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 044 located at SEG028* on counter weight side of segment. Welder is identified as Mr. Li Zhengqiang (066038). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and CWR 1136 R1 repair procedure.

Y Location of repair by above noted welder (066038) is located at 700mm.

6CW

Shield Metal Arc Welding (SMAW) welding was performed on weld joints 012 located at OBW6F on counter weight of segment. Welder is identified as Mr. Zhang Hanming (220066). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2231T-1.

BK001-022

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 009 located at BK001-002 on

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cantilever bike path member. Welder is identified as Mr. Han Xiaofeng (054467). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-Repair-1 and WR10475 repair procedure.

NDT Observation

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

6BE

1. Excavations (UT rejects) located on the edge plate to deck plate weld on bike path side of segment. Y locations are at 1068~1118, 1405, 1617, 3192~3252, 4805 and 6525~6610mm.

BK001-018

1. Weld joints BK001-018-005, 007, 006, 009 and temporary attachments areas.

BK001-023

1. Weld joints BK001-018-005, 007, 006, 009 and temporary attachments areas.

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. Heat straightening was performed on deck plate stiffener (DP518-001-007~012) located on the bike path side of segment per HSR (B)-8066.

6AE

This QA Inspector observed repair area (Y location 460mm) on weld joint SEG028-044 has been inspected and accepted by ZPMC and ABF QC department. ZPMC had excavated the noted area for no reason and without notifying ABF and Caltrans. ZPMC did not record excavation performed area for Caltrans MT/UT required inspection verification nor submitted a WWR or CWR. ABF representative Mr. Raymond Mah was present at the time of this QA Inspector observation and stated he will issue an NCR for this matter.

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 (150-0042-2372), who represents the Office of Structural Materials for your project.

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