

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-013624**Date Inspected:** 19-Apr-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**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

7DE

Shield Metal Arc Welding (SMAW) welding was performed on weld joints 028 located at SEG040A cross beam side of segment. Welder is identified as Mr. Zhao Aifei (067942). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2214-Tc-U4b-FCM-1.

Shield Metal Arc Welding (SMAW) welding was performed on weld joints 001 located at CA042 bike path side of segment. Welder is identified as Mr. Chen Hongjun (067609). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2214-Tc-U4b-FCM-1.

7EE

Shield Metal Arc Welding (SMAW) welding was performed on weld joints 001 located at CA045 cross beam side of segment. Welder is identified as Mr. Zhao Aifei (067942). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2214-Tc-U4b-FCM-1.

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Shield Metal Arc Welding (SMAW) welding was performed on weld joints 005 located at CA046 bike path side of segment. Welder is identified as Mr. Chen Hongjun (067609). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2214-Tc-U4b-FCM-1.

7BE

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 141 located at SSD27-PP051 cross beam side of segment. Welder is identified as Mr. Dai Lu (048659). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2213-Tc-U4b-FCM-1 and RFI-BJC53R0.

7BW+7AW

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 019 located at DP639-001 cross beam side of segment. Welder is identified as Mr. Zang Yanbo (045196). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-485-SMAW-3G (3F)-FCM-Repair-1 and WR11965.

7DE+7EE

Shield Metal Arc Welding (SMAW) VT repair welding was performed on bottom plate t stiffeners of segment. Welder is identified as Mr. Ji Yi (045268). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-4G (4F)-Repair-1 and WR11052 repair procedure.

BK001-028

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 009 located at BK001-028 bike path cantilever member. Welder is identified as Mr. Zhang Hanming (067609). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2231-Tc-U4b-F.

BK001-030

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 053~056 located at BK001-028 bike path cantilever member. Welder is identified as Mr. Peng Jiancheng (222396). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2133.

NDT Observation

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

7DE+7EE

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1. Bottom plate weld splice on the exterior side.

8CW

During random in-process visual inspection at Segment 8CW counter weight side of segment, this QA Inspector observed UT reject repairs welding being performed by three (3) ZPMC welders without a CWI, CWR and WPS present on today's work shift (0925~1025).

This QA informed ABF Lead QA identified as Mr. Raymond Mah that ZPMC QC has not been present during the repair welding. Mr. Mah informed This QA that an ABF QA Inspector had been monitoring the repair. This QA asked the ABF QA Inspector for the CWR and WPS. The ABF inspector was unable to produce any of the documentation requested. This QA Inspector issued an incident report for noted issue.

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

Inspected By: Alaniz, Joe

Quality Assurance Inspector

Reviewed By: Carreon, Albert

QA Reviewer