

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-013067**Date Inspected:** 11-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:** Mr. Zhu Tian Shu**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:** Orthotropic Box Girder (OBG)/Tower**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

This QA Inspector Randomly observed the following work in progress:

BAY-2-Floor Beam (FB)

Submerged Arc Welding (SAW) welding of weld joint FB3202-001-001. Welder is identified as 045270. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2221-B-L2c-S-2.

This QA Inspector observed ZPMC Tack welder was performing Tack welding by Shielded Metal Arc Welding (SMAW) process for the FB weld joint FB3215-001-005/006. The tack welder was identified as 045251. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The tack welding was being performed against the Caltrans Engineer approved Welding Procedure Specification (WPS): WPS-B-P-2112.

BAY-6-Traveler Rail (TR)

This QA Inspector observed ZPMC welding personnel performing Buttering by Flux Cored Arc Welding (FCAW)

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process for 10TR1-005. Welder is identified as 051246. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e. WPS-345-FCAW-1G (1F)-Repair-1. The Buttering welding was been performed against the B-CWR1100 Rev No: 0 and ZPMC Quality Control (QC) is identified as Mr. Cui jun jie and Certified Welding Inspector (CWI) is identified as Mr. Liu fa wen.

This QA Inspector observed ZPMC welding personnel performing Buttering by FCAW process for 11TR3-021. Welder is identified as 048625. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e. WPS-345-FCAW-1G (1F)-Repair-1. The Buttering welding was been performed against the B-CWR1100 Rev No: 0 and ZPMC Quality Control (QC) is identified as Mr. Cui jun jie and Certified Welding Inspector (CWI) is identified as Mr. Liu fa wen.

This QA Inspector observed ZPMC welding personnel performing Buttering by FCAW process for 11TR3-006. Welder is identified as 062447. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e. WPS-345-FCAW-1G (1F)-Repair-1. The Buttering welding was been performed against the B-CWR1100 Rev No: 0 and ZPMC Quality Control (QC) is identified as Mr. Cui jun jie and Certified Welding Inspector (CWI) is identified as Mr. Liu fa wen.

BAY-6-WEST JACKING FRAME (WJF)

SMAW welding of weld joint WJF-0-338 and WJF-0-172. Welders are identified as 048800 and 066261 respectively. ZPMC Quality Control (QC) is identified as Mr. Zhang sheng jun. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-3112-1 and WPS-B-T-3212-TC-U4c respectively.

BAY# 11 -TOWER.

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 005503.

Magnetic Particle Testing (MT)

This QA performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated MT report for this date. The member is identified as Lift 4 West Tower pad eye weld Components. Total number of welds MT Tested: 06 No's. The weld designations are review as follows:

1. WSD1-FCSA4-2A/C-96~99.
2. WSD1-FCSA4-2A/C-88, 89.

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted notification No: 005503.

Visual Inspection (VT)

This QA Inspector performed VT of the area previously tested and accepted by ZPMC QC Personnel. The member is identified as Lift 4 West Tower pad eye weld Components. The weld designations are review as follows:

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1. WSD1-FCSA4-2A/C-88~99.

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 Quality Control (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 15000422372 / Skyler 15000422360, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer
