

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-015499**Date Inspected:** 07-Jul-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) Shrikant Utekar 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:

TRIAL ASSEMBLY YARD

ULTRASONIC INSPECTION

CROSS BEAM # 11

ABF Report No: UT-CB11-002

This QA Inspector performed verification Ultrasonic Testing (UT) in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a data sheet that Caltrans QA generates after performing a joint inspection. The members are identified as the weld between side panel and deck panel (West & East Side) of cross beam #11. The weld designations are as follows.

CB202A-011-002 (C.B #11 – S.P to D.P, East side)

CB202A-011-014 (C.B #11 – S.P to D.P, West side)

TRIAL ASSEMBLY YARD

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

This QA Inspector randomly observed the following work in progress.

OBG SEGMENT 9AE-9BE-9CE

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 048659 performing Shielded Metal Arc Welding process for weld 021 located on PCMK SEG052A. ZPMC QC Mr. Wang Li Yang monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-Tc-u4b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 220066 performing Flux Cored Arc Welding process for weld 036 located on PCMK SSD27-PP75. ZPMC QC Mr. Xu Jin Long monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-P-2132-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 222396 performing Flux Cored Arc Welding process for weld 048 located on PCMK SSD27-PP75. ZPMC QC Mr. Xu Jin Long monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-P-2233-B-u2a-f-a.

This Quality Assurance (QA) Inspector observed ZPMC personnel performing Ultrasonic Inspection for the hold back weld between edge panel and side panel at splice weld between OBG segment 9BE and 9CE (Cross beam side).

This Quality Assurance (QA) Inspector observed ZPMC personnel performing Magnetic Particle Inspection for the hold back weld between side panels and "T" stiffener in OBG segment 9BE at splice weld between OBG segment 9BE and 9CE (cross beam side).

INCIDENT

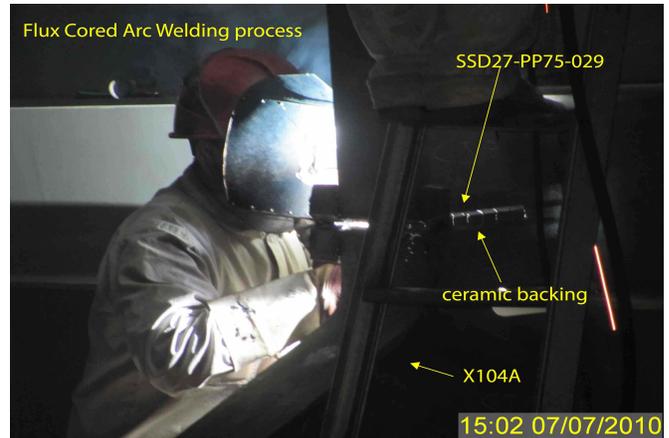
OBG SEGMENT 9BE

During random in process visual inspection this Caltrans Quality Assurance Inspector (QA) observed the Contractor personnel performed welding without approved welding procedure specification (WPS). This welding was performed in the 2G position with Flux Cored Arc Welding (FCAW) process. The welding performed with ceramic backing and the weld is detailed as a single "V" groove complete joint penetration (CJP). Weld is identified as SSD27-PP075-029. Incident report was issued for this issue. For additional information, please see the attached pictures below.

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

WELDING INSPECTION REPORT

(Continued Page 3 of 3)



Summary of Conversations:

Only general conversation was held between QA and QC

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, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

Inspected By: Utekar,Shrikant

Quality Assurance Inspector

Reviewed By: Peterson,Art

QA Reviewer