

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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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-000946**Date Inspected:** 26-Nov-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 1430**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Lefeng**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:** 89M Tower Mock Up**Summary of Items Observed:**

Tower Mock Up:

Bay 2:

The Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower Mock Up.

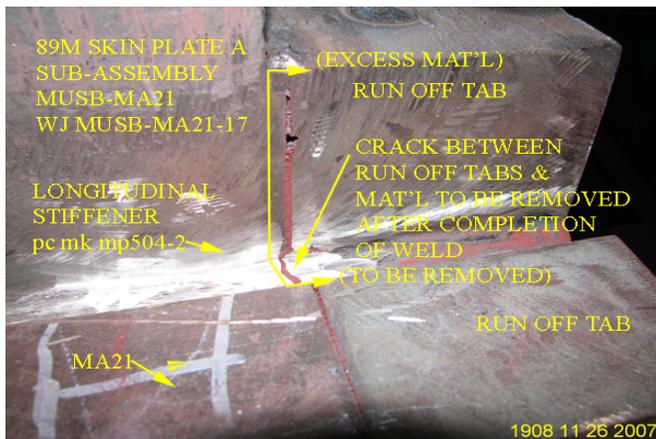
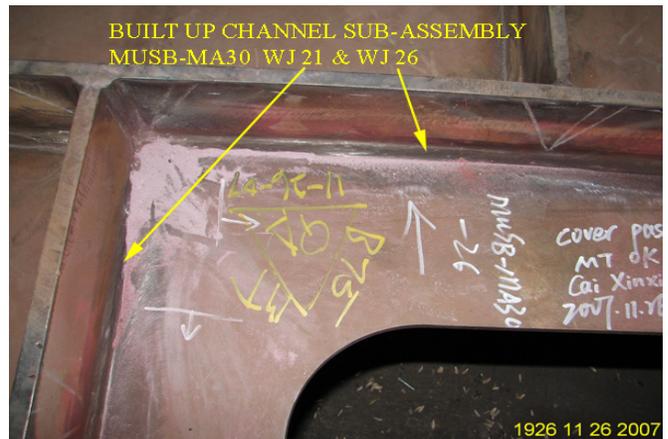
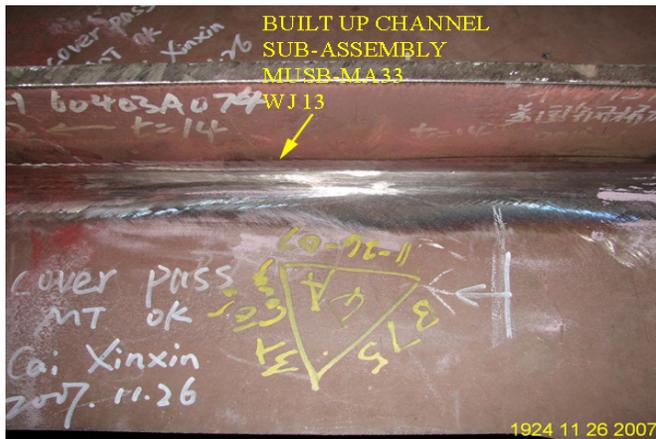
The QA Inspector performed a minimum 10% random Magnetic Particle Inspection (MT) of the cover passes on 89M Channel Sub-Assembly MA30, on Weld Joint (WJ) numbers MUSB-MA30-5 and 6; 89M Channel Sub-Assembly MA33 WJ's MUSB-MA33-9, 10 and 13; 89M Strut Facade Sub-Assembly MA36 WJ's MUSB-MA36-5 and 6, and 89M Strut Facade Sub-Assembly MA37 WJ's MUSB-MA37-3 and 4. The QA Inspector observed no apparent indications. The QA Inspector randomly observed that ZPMC MT Technicians Cai Xin Xin and Zhou Dongyun, had performed the contract required MT Inspection of the above WJ's, accepted the welds and placed the information adjacent to the above welds. The attached photographs provide additional detail.

The QA Inspector randomly observed ZPMC Non Destructive Technicians Cai Xin Xin and Zhou Dongyun, performing MT examination on 100% of the full lengths of the root passes of Partial Joint Penetration WJ's MUSB-MA21-5 and 17 on 89M Skin Plate A, Sub Assembly MUSB-MA21. The QA Inspector performed a 20% random MT examination of the above welds. There appeared to be no indications and ZPMC QC accepted the root passes of WJ's MUSB-MA21-5 and 6. The following photograph provides additional detail.

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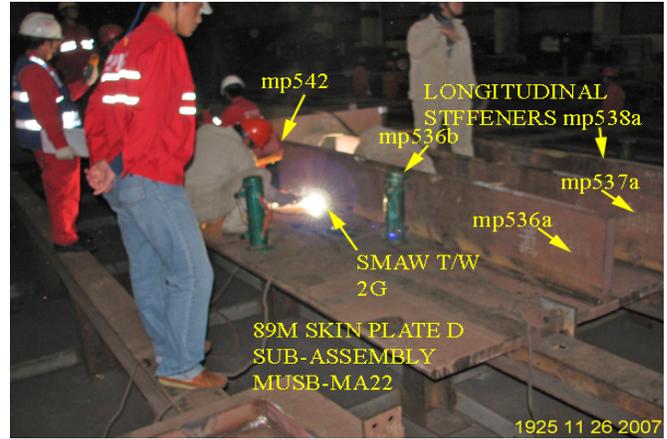
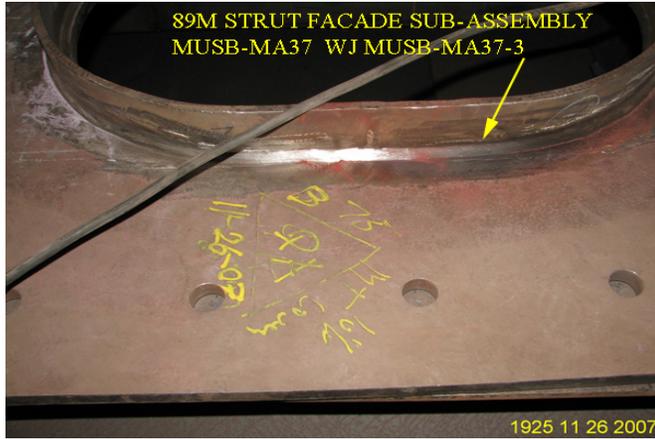
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The QA Inspector randomly observed ZPMC welders Li Zhangxu ID Number 066179 and Ma Zhiyong ID Number 066019, utilizing the Shielded Metal Arc Welding (SMAW) Process with approved ZPMC Weld Procedure Specification (WPS) WPS-B-P-2212-TC-U5b in the 2G position to tack weld Longitudinal Stiffener mp536a/536b/542 to Skin Plate D, at WJ's MUSB-MA22A/F-11 and 12. The QA Inspector observed ZPMC CWI Xu Lefeng monitoring weld parameters. The QA Inspector also performed random verification of the weld parameters and documented them as follows: welding amperage 220 amps, welding voltage 26.5 volts with a travel speed of 172 millimeters per minute for Mr. Ma and 200 amps, 25 volts with a travel speed of 163 millimeters per minute for Mr. Li. Weld parameters appeared to comply with the above approved ZPMC WPS. The attached photograph provides additional detail.



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Summary of Conversations:

There were no relevant conversations.

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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By: Franco,Charlie

Quality Assurance Inspector

Reviewed By: Cochran,Jim

QA Reviewer