DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-001629
Date Inspected: 21-Feb-2008

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 600
OSM Departure Time: 1530
Location: Shanghai china

CWI Name: Sha Zhi , Zhu Zhong Hai

Inspected CWI report:	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A

CWI Present:	☑ Yes	☐ No	
Rod Oven in Use:	☑ Yes	☐ No	☐ N/A
Weld Procedures Followed:	☑ Yes	☐ No	☐ N/A
Verified Joint Fit-up:	☑ Yes	☐ No	☐ N/A
Approved WPS:	☑ Yes	☐ No	☐ N/A
Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: Tower 89 and 114m mock up

Summary of Items Observed:

89m Mock up

This Quality Assurance (QA) inspector arrived at ZPMC for observation at the tower shop for the 89m mock-up and witnessed ZPMC personnel performing Flux Cored Arc Welding (FCAW) on the corner stiffener plate located at skin plates B and C. ZPMC welding personnel Lei Li Chao was observed performing the process for the Partial Joint Penetration (PJP) groove in the horizontal position (2G) preheat was verified by this QA Inspector as a minimum of 110ºc but no more than 230ºc using a temperature indicating markers. ZPMC Quality Control/Certified Welding Inspector (QC/CWI) personnel Sha Zhi and this QA inspector verified the welding parameters for WPS-B-T-2332-TC-P4-T as follows; 294 amps, 31.6 volts and a travel speed of 315mm/min which appeared to be within the tolerances of the above WPS. ZPMC personnel were observed as continuing with the drilling of the bolt holes at skin E for the shear link connection plate and after further review by this QA Inspector it was determined that ZPMC was not following their approved fabrication procedure for the 89m mockup . According to their procedure ZPMC was to have the 89m mockup placed in a “jig” so skin plate E was at a level surface for the bolt hole drilling. This was not the way ZPMC performed the drilling, skin plate E was left a skewed angle and the mag drills were tied off with rope to prevent them from falling. A incident report will be generated by this QA inspector for today’s date.

77m mock up

This Quality Assurance (QA) inspector arrived at ZPMC for observation at the tower shop for the 77m mock-up and witnessed ZPMC personnel performing final finish grinding on skin plate C which was identified by ZPMC Quality Control personnel. The work above was witnessed at periodic intervals throughout this QA Inspectors shift.

WELDING INSPECTION REPORT

Burn Table Bay 3

This QA Inspector observed ZPMC cutting A709-345T2-225 steel plates identified as piece numbers P203 for skin plate D and Sa179 for skin plate C. This QA Inspector was informed that ZPMC was given approval to start cutting the skin plates for the project.

Summary of Conversations:

As Noted in content above

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:	Riley,Ken	Quality Assurance Inspector
Reviewed By:	Cochran,Jim	QA Reviewer