

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-009679**Date Inspected:** 03-Oct-2009**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:** ZPMC and ABF**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 date Caltrans OSM Quality Assurance (QA) Inspector Mr. Wai Pau, was present during the times noted above for observations relative to the work being performed.

Bay #1

Counter weight box: - Caltrans QA inspector observed two ZPMC welding operators performed an electric arc stud weld process on the interior surface of base plate for counter weight box #78. The stud size is 19mm diameter x150mm length. A stud and ceramic ferrule are loaded into the gun, and the gun properly positioned against the base plate on the assigned location with down hand welding position. The stud welding has been completed approximately two hours on one side of base plate. The counter weight box need rotate to another side for stud welding. The stud welding process was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Caltrans QA inspector observed two ZPMC workers and one welder performed fit up and SMAW tack weld process on the divide plate of counter weight box #62. A numerous temporary tack welds have been welded attach to the divide plate after adjusted and secured by hand jack. The fit up and SMAW tack welding process were monitored and recorded by ZPMC and ABF QC inspector. Base on Caltrans QAI observation, no discrepancies were noted.

Caltrans QA inspector observed one ZPMC worker performed spots grinding on surface for base plate of counter weight box #76. The purpose of spots grinding is removed the rust surface prior stud welding. The grinding process was monitored and recorded by ZPMC and ABF QC inspector. Base on Caltrans QAI observation, no

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discrepancies were noted.

Bay #2

Floor beam type 1:- Caltrans QA inspector observed two ZPMC welders performed FCAW fillet weld process on stiffeners for type-1 of floor beam #FB-3002-001 AND #FB-3084A-001. The fillet weld size is 6mm and 8mm with single pass and multiple pass. The FCAW fillet welds process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Floor beam type 2:- Caltrans QA inspector observed two ZPMC workers performed hole drilling process on the base plate of floor beams type2. The floor beams ID were FB3070-003 and FB3015-003. The holes template has been installed and secured by clamp prior holes drilling. The holes drilling process was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Bay #6

Tower strut: - Caltrans QA Inspector observed two welders performed two spots SMAW noncritical weld repair process on tower strut. The tower struts ID was WD1-A305-65M-3. All of FCAW noncritical repair weld located at web to flange of tower strut which have been rejected by ZPMC UT testing. The weld repair report number is T785-UT-2271 and T785-UT-2273 and the weld repair areas are 60mm height x 25mm wide x 35mm depth and 65mm height x 25mm wide x 40mm depth. The SMAW noncritical weld repair is monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA inspector observations, no discrepancies were noted.

Bottom plate: - Caltrans QA inspector performed final dry MT inspection on fillet welds for stiffeners of bottom plate. The bottom plate and weld ID number is BP201-015-001~004, BP-3010-001-053~055, 071, BP3010-001-023,024, 027~030, 037, 038, 041~044, 049, 050, BP3010-001-001~008, BP3010-001-017~022, 025, 026, 031, 032, BP-3010-001-033~036, 039, 049, 045, 046 and BP3010-001-047, 048, 051, 052. The fillet welds for dry MT inspection have been accepted by ZPMC prior Caltrans QA inspection. Base on Caltrans inspection, the welds appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

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



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Summary of Conversations:

As notes within report 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 Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Pau, Wai	Quality Assurance Inspector
Reviewed By:	Clifford, William	QA Reviewer
