

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-010603**Date Inspected:** 28-Nov-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**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 Components**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.

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Traveler rail: - Caltrans QA inspector observed eight ZPMC welders performed FCAW process on the flange to web plate of traveler rail #11TR2-005, 11TR2-006, 11TR3-015, 10TR1-003, 11TR3-026, 11TR1-013, 11TR1-023, 11TR1-018, 11TR1-010, 11TR1-011, 11TR3-026, 11TR2-017 11TR3-016 and 11TR2-013. This type component designed has CJP and PJP weld along on one side of full weld length and other side has CJP only. All the welding areas have been pre heating prior FCAW welding. The FCAW process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Traveler rail: - Caltrans QA inspector observed three fit up groups performed fit up and SMAW and FCAW tack weld process on the flange to web plate of seven 10TR and 11TR type traveler rails. Each group has two workers and one tack weld welder. During observation, the traveler rails have not been identified by ZPMC at this time. A numerous temporary tack welds have been welded attach to the web after adjusted and secured by template. The fit up and SMAW and FCAW tack welding process were monitored and recorded by ZPMC and ABF QC inspector. Base on Caltrans QAI observation, no discrepancies were noted.

Traveler rail: - Caltrans QA inspector observed two ZPMC workers performed grinding process on one side edge of web for traveler rail. The purpose of the grinding is getting a suitable bevel for the web prior fit up to the flange. A total eight webs of travel rail have been completed re-bevel. The grinding process was monitored and recorded

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by ZPMC and ABF QC inspector. Base on Caltrans QAI observation, no discrepancies were noted.

Traveler rail: - Caltrans QA inspector observed two welders performed carbon arc back gouging process on the flange to web plate of traveler rail. A back gouging is on one side of flange to web of three traveler rails. Approximately 8mm sound wall thick has been gouged out. The back gouging area has been re-bevel to request design joint by grinding and the beveled surface is entirely free of the scale, traces of oxide films and other contaminants prior welding. Base on Caltrans observation, no discrepancies were noted.

Traveler rail bracket: - Caltrans QA inspector performed final MT inspection on the fillet welds of eighteen traveler rail bracket. The fillet welds are attached to square tube. The traveler rail brackets weld ID are tr1d-pp033-007/008, tr5c-pp031-005/006, tr5c-pp035-005/006, tr5b-pp035-003/004, tr5d-pp032-007/008, tr5c-pp029-005/006, tr5b-pp033-003/004, tr5b-pp031-003/004, tr5b-pp029-003/004, tr6c-pp032-005/006, tr6e-pp030-001/002, tr6b-pp030-003/004, tr6b-pp036-003/004, tr6c-pp034-005/006, tr6e-pp036-001/002, tr6a-pp034-001/002, tr6e-pp032-001/002 and tr1a-pp021-001/002 All the welds have been tested and accepted by ZPMC prior Caltrans testing. Base on Caltrans inspection, the fillet 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.

Summary of Conversations:

As notes within report above.



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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
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Reviewed By:	Clifford, William	QA Reviewer
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