

**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 #: 70.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003264**Date Inspected:** 17-Jul-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1000**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1800**Contractor:** Japan Steel Works**Location:** Muroan, Japan**CWI Name:** Kuan Chung**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:** Tower, Jacking and Deviation Saddle**Summary of Items Observed:**

The following report is based on METS observations at Japan Steel Works (JSW) in Muroan Japan. Current work: Casting, machining and repair of Saddles.

**Welder Qualification Test Witness**

The Caltrans Quality Assurance (QA) inspector Mr. Dong J, Shin arrived at JSW fabrication shop number 4 and observed a welder qualification test for Mr. Makoto Kato (08-5018), Mr. Satoru Watanabe (08-5159) and Yuichi Arai (08-5157). The welder testing was performed utilizing the Gas shielded Flux Core Arc Welding Process in the Horizontal position (2G) with Welding procedure specification No SJ-2983 WP-5. The filler metal of Flux Core Arc Welding wire appeared to be E70T-5MJ H4, AWS designation A5.29, 1.6 mm diameter. The test was performed per the AWS D1.5, 2002 Section 5.23.1.2 and Figure 5.18 requirements. The Intertek QC inspectors, Mr. Kuan Chung checked joint preparation prior welding and checked welding parameter and recorded the preheat and interpass temperatures, the average amperage, voltage and gas flow.

The QC Inspector has rejected Mr. Makao Kato (08-5018) and Mr Satoru Watanabe (08-5159) test coupons by visual inspection.

**NDT Inspection**

On this date the QA representative Dong J, Shin arrived at Japan Steel Works (JSW) of Muroan Japan and traveled to JSW fabrication shop # 4, QA Inspector observed NISC NDT technician Mr. K, Kobayashi and Mr. R, Kumagai performed Magnetic Particle testing on run out tab removal areas. Magnetic particle testing was with

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# WELDING INSPECTION REPORT

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yoke AC current with red particles.

Machine shop # 2

On this date the QA representative Dong J, Shin arrived at Japan Steel Works (JSW) of Muroran Japan and traveled to JSW fabrication shop # 4, QA Inspector observed plate cutting in progress.

Piece number 8-12 (plate No 012573-1) and 8-2, 8-3 (plate No 011919-1)

Mechanical Test

QA Inspector observed side bend test for Welder Qualification test with AWS D1.5(2002) Sec,5.27.3 and Figure, 5.25 The Test results were as follow.

Welder Name	Welder ID#	Test Positions	Test Result
Masafumi Nakagawa	94-2439	FCAW 2G	Acceptable
Toshiyuki Watanabe	08-5153	FCAW 2G	Acceptable
Masao Yamashita	73-4195	FCAW 2G	Acceptable
Kenichiro Sadakawa	06-2929	FCAW 2G	Acceptable
Naoki Murai	97-2118	FCAW 2G	Acceptable

**Summary of Conversations:**

No specific 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 Venkatesh Iyer, (858) 967-6363, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Shin,DJ	Quality Assurance Inspector
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<b>Reviewed By:</b>	Lanz,Joe	QA Reviewer
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