

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-005696**Date Inspected:** 06-Mar-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1100**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Japan Steel Works**Location:** Muroran, Japan

CWI Name:	Imai Jomio (ASME Welding Engineer)			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 saddles		

Summary of Items Observed:

Casting Shop:

W2-E3 West Deviation Saddle Casting Portion (QA MT test): Caltrans QAI performed QA required 10% dry MT test on the exterior and interior casting surface of W2E3 west deviation saddle casting portion after PWHT and sand blasting. The test areas have been MT test accepted by JSW NDT level II technician prior QA MT test. The QA dry MT test is using the yoke method. The contour yoke utilized appeared to be model DA-400, serial numbers 16990 and the visible dry red magnetic particles were utilized batch #15996 all made by Parker research Corp. The magnetic field was verified with a field indicating gauge (pie gauge). The QA MT test have been completed and accepted. The QA MT test operation appeared to be in general compliance with requirements of ASTM standard E709 and Caltrans contract documents.

E2-W1 East Deviation Saddle Casting Portion (shaping): Caltrans QAI observed two welder performed carbon-arc-gouging (shaping) process on exterior rough surface of rib sides of E2-W1 east deviation saddle after rough machining. The gouging purpose is the exterior rough surface areas are not uniform surface and not able to use machining. The gouging purpose is remove all of exceed metal from the rib areas. The equipment used for gouging is manual torch with 10mm gouging electrode all made in Japan. The gouging process will continue for two week. Base on Caltrans observation, no discrepancies were noted.

W2-W2 West Deviation Saddle Casting (repair welding): Caltrans QAI observed a JSW welder perform SMAW standard repair welding on exterior ribs 4L and 5L sections of W2-W2 west deviation saddle casting portion. The repair welding areas have been excavated 5mm to 8mm depth. The proper filler metal used for SMAW is LB62

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

with 5mm diameter electrode made by Kobe, Japan. The entire casting portion is preheated to temperature at min 150 C during repair welding. Based on Caltrans QA observation, the buildup SMAW welding operation appeared to be in general compliance with requirements of ASME IX 2005.

Summary of Conversations:

As noted within the 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 Nina Choy, (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
Reviewed By:	Lanz,Joe	QA Reviewer
