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 #: 70.28

WELDING INSPECTION REPORT

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

Report No: WIR-002379
Date Inspected: 27-Mar-2008

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Japan Steel Works

OSM Arrival Time: 830
OSM Departure Time: 1930
Location: Muroran, Japan

CWI Name: Chung Kuan and MaKhmud Ashadi

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: PQR test plate

Summary of Items Observed:

Witness Procedure Qualification Record (PQR) qualification test (SW-5-2): Caltrans Quality Assurance Inspector (QAI) representative Mr. Wai Pau, travel to Japan Steel Works (JSW) Muroran plant to witness an AWS D1.5 standard PQR qualification welding test. The number of PQR qualification welding test is SJ-2942-WP-8 (test plate SW-5-2). The PQR qualification test utilizing Shielded Metal Arc Welding (SMAW) was conducted by welder Mr. Kouzou Kobayashi (08-5023) performed in the vertical position (3G). with set the electrode at a10 degree angle above horizontal line when the welder strike with the short arc method and lift the electrode up. The material used for the PQR qualification test specimens was reported by JSW Welding Engineer Mr. Takaaki Maruya as ASTM A709-HPS-485WT (plate to plate) having a wall thickness measurement of 50mm. The weld joint design used butt joint, single-V-groove weld with 20mm x 75mm backing bar. The filler metal used in the test is Hoballoy 9018-M with 5mm diameter electrode, made by Hobart Brothers, USA. The SMAW welding and parameters have been monitored and recorded by CWI inspectors Mr. Chung Kuan, Mr. MaKhmud Ashadi and JSW Welding Engineer Mr. Takaaki Maruya, and were also observed by Caltrans QAI. A total of ten interior filler weld passes (#34 to #44) were completed on this date. The preheat temperature of the test plate is to be held at 120 C overnight for the continuation of the welding at tomorrow. Based on Caltrans QA observation, no discrepancies were noted.

AWS D1.5 standard welder qualification test: Caltrans QAI reviewed a WPS which provided by JSW used for AWS D1.5 standard welder qualification test. During reviewing, the ampere, welding travel speed and heat input for this WPS were found not complied with the requirements of the support PQR SJ-2942-WP-3. After discussion with CWI MR. Chung Kuan and JSW Mr. Takaaki Maruya, the WPS for welder qualification test will be rewrite and the welder qualification welding test also postpone to further note.

WELDING INSPECTION REPORT

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Summary of Conversations:

As Note 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 Venkatesh Iyer (858)697-6363, who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
Reviewed By:	Brasel,Ron	QA Reviewer