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 #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-027347
Date Inspected: 19-Mar-2012

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

OSM Arrival Time: 700
OSM Departure Time: 1730
Location: Job Site

CWI Name: Bernie Docena

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: SAS Tower

Summary of Items Observed:

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At outer West external diaphragm drop in plate WD1-A46 weld joint #059 (1 and 2) and #060 (1). ABF welder Jin Pei Wang was observed perform root pass to fill pass welding on the PJP T-joint between the 45mm drop in plate and shear plate/tower skin plate and splice butt joint to diaphragm plate. The welder was noted welding at 1G (flat position) utilizing a dual shield Flux Cored Arc Welding (FCAW-G) with E71T-1M, 1/16” diameter wire electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-3160-1. The plates were preheated and maintained to required 325° temperature using Miller Proheat 35 Induction Heating System. The welder performed FCAW-G welding fill pass until the end of the shift where the welder has not completed the three (3) weld joints. The welder performed the post weld heat treatment (PWHT) after welding using the same preheat temperature and heating machine and held it for three hours as required.

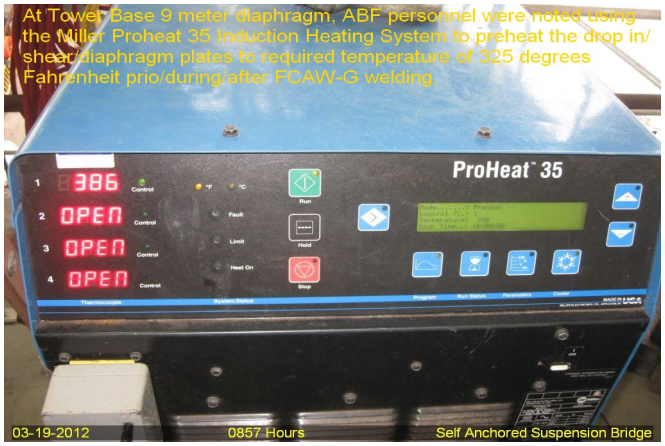
At outer West external diaphragm drop in plate WD1-A60 weld joint #057 (1 and 2) and #058 (1). ABF welder Wai Kitlai was observed perform root pass to fill pass welding on the PJP T-joint between the 45mm drop in plate and shear plate/tower skin plate and splice butt joint to diaphragm plate. The welder was noted welding at 1G (flat position) utilizing a dual shield Flux Cored Arc Welding (FCAW-G) with E71T-1M, 1/16” diameter wire electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-3160-1. The plates were preheated and maintained to required 325° temperature using Miller Proheat 35 Induction Heating System. The welder performed FCAW-G welding fill pass to cover pass until the end of the shift where the welder

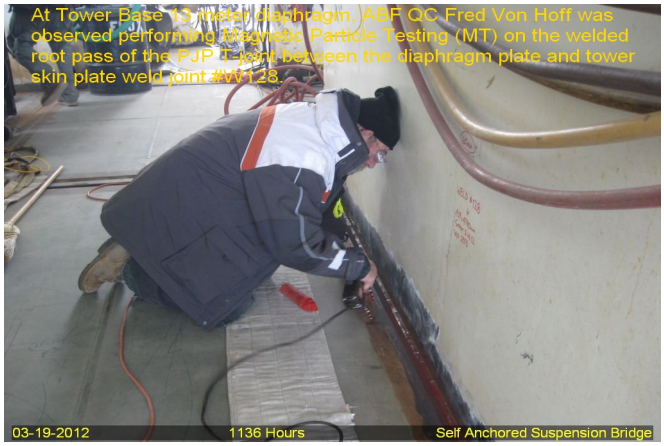
has completed the three (3) weld joints. The welder performed the post weld heat treatment (PWHT) after welding using the same preheat temperature and heating machine and held it for three hours as required.

At Tower Base 9 meter South external diaphragm below drop in plates SD1-A55 and SD1-A53, ABF welder Han Wen Yu was observed continuing to perform fit up/tack welding on the two (2) stiffener plates to shear plate and vertical stiffener plate. The welder was noted using Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode. At the end of the shift, fit up tack welding of the stiffener plates for the South external diaphragm was completed.

At the request of Quality Control Field Supervisor, Bonifacio Daquinag, QA has randomly verified the QC MT of the Partial Joint Penetration (PJP) welding on root pass of T- joint weld #W128. The QA verification was performed to verify that the welding and the MT inspection performed by the QC inspector meet the requirements of the contract documents. At the conclusion of the QA verification it appeared that the weld and the QC inspection complied with the contract documents.

1. Tower Base 13 meter North external diaphragm W#128 root pass – QA MT verified.





Summary of Conversations:

No significant conversation ocurred today.

Comments

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

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 SMR Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo,Joselito	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer