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 #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

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

Report No: WIR-012462
Date Inspected: 08-Mar-2010

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

OSM Arrival Time: 1200
OSM Departure Time: 2030
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: 1E-2E Bottom plate deck stiffeners

Summary of Items Observed:

At the start of the shift the Quality Assurance Inspector (QAI) was presents on the job site during the times noted above and observed the following work performed by American Bridge/Fluor (ABF) personnel at the 1E/2E Bottom Plate field splice:

A). Bottom Field Splice E1 to E2 Deck Stiffeners.

A). The QA Inspector observed the Flux Cored Arc Welding (FCAW-G) of the weld joint's identified as Weld Number's 1E-2E D-S7, D-S8, D-S10 and DS-11 along with E1-E2 D1-D2 segment 1. The welding was performed by ABF personnel Song Tao Huang (3794), Jim Quan Huang (9430) and James Zhen (6001). The QA Inspector also observed the ABF (QC) Inspector's Bernie Docena and performing Visual Testing (VT) on the welds, with No Rejectable Indications observed during the welding process. The ABF (QC) inspector Bernie Docena also performed Magnetic Particle Testing (MT) and Ultasonic Testing (UT) on weld's D-S1 through D-S4 with No Rejectable Indications observed. The ABF (QC) inspector's also verified the minimum preheat temperature of 140*F and the maximum interpass temperature of 230*F. The welding performed during this shift was not completed. The QA Inspector also observed Quality Control (QC) inspector Bernie Docena verify the FCAW welding parameters and the surface temperatures during the welding process and the average readings were noted as follows: 210 amps, 22.8 volts with a travel speed measured between 205mm and 248mm per minute. The surface temperature was noted by the (QC) Inspector and was noted as follows. The minimum preheat temperature of 100*F and the maximum interpass temperature of 230*F.

Quality Control (QC) Inspector's Bernie Docena and Jesse Cayabyab monitored and verified welding parameters

WELDING INSPECTION REPORT

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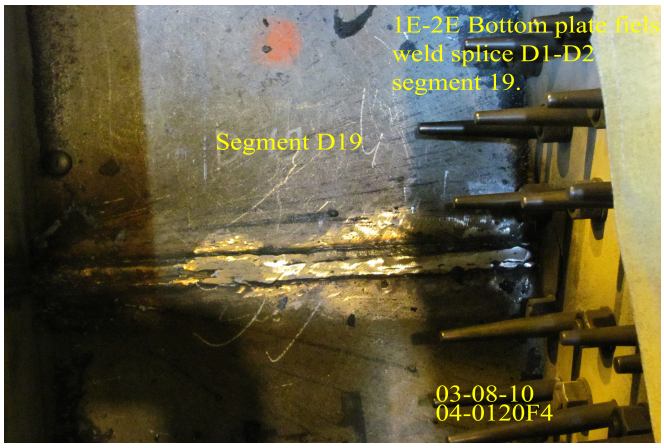
and surface temperatures utilizing a Fluke 337 Clamp Meter. The (QA) Inspector also verified welding parameters and preheat temperatures utilizing a Fluke 337 clamp meter for the electrical welding parameters and a Fluke 63 IR thermometer for verifying that the preheat and interpass temperatures were maintained. The consumables utilized during the welding were observed to be ESAB Dual Shield 70 Ultra Plus with an electrode size of 1.6mm. The ABF (QC) inspector's appeared to perform the visual examinations, monitoring and verification of the welding as per the contract documents. The welding and (QC) inspection performed on this shift was not completed and appeared to be in general compliance with the contract documents.



Summary of Conversations:

No relevant conversations noted at this time.

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 Mohammed Fatemi (916)-227-5298, who represents the Office of Structural Materials for your project.

Inspected By:	Richmond,Gary	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer