

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1x.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-026939**Date Inspected:** 20-Dec-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name:	Bernie Docena		
Inspected CWI report:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A

CWI Present:	Yes	No	
Rod Oven in Use:	Yes	No	N/A
Weld Procedures Followed:	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:** Bike Path - Skyway**Summary of Items Observed:**

This Quality Assurance (QA) Inspector, Art Peterson arrived on the jobsite between the times noted above to randomly observe Quality Control (QC) personnel perform Non-Destructive Testing (NDT) and monitor the welding operations performed by American Bridge Fluor (ABF) personnel on the bike path box panels of the Skyway portion of the SFOBB. The following observations made were for extra work being performed to the following contract change order:

CCO: 193 - Description: Modify the existing bike path box panels at the expansion joints of the Skyway portion of the SFOBB East Span Seismic Safety Program.

This QA Inspector randomly observed ABF welder Mr. Jason Collins (Welder ID 8128) performing the fill and cover pass weld operation on a partial-joint-penetration (PJP) groove weld per the Flux Cored Arc Welding (FCAW-S) self shielding process in the (2G) horizontal position connecting the New End Plate to the existing bottom soffit plate of the bike path panel at expansion joint Hinge "D" as per approved ABF Submittal no. 2549R1 of Contract Change Order (CCO) 193.

This QA Inspector observed QC Inspector Mr. Bernie Docena verify prior to the start of the fill and cover pass weld operation that the preheat temperature of 150 degrees F was established and afterwards verified that the welding parameters (Amps, Volts and Travel Speed) were in accordance with ABF-WPS-D15-2160-1 using the E71T8 NR232 electrode - (.072") diameter electrode. The welding operation of the PJP groove weld was completed on this date at expansion joint Hinge "D".

The welding observed on this date appeared to be in general compliance with WPS-D15-2160-1 and the work performed appeared to be in general compliance with contract change order (CCO) 193.

Note: The reason for welding the New End Plate was at the Expansion Joint Hinge "D", this QA Inspector

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previously observed ABF personnel cut back the top and side box panel plates and the diaphragm plate using an oxyacetylene cutting torch on a track system and also observed ABF personnel use a mechanical cutting blade on the existing bottom soffit plate of the bike path panel. The cut back distance was measured at 116 mm as per Contract plan sheet number 1164S7 and ABF Submittal number 2549R1. The New End Plate has been connected and the welding operation was completed on this date.

After the PJP groove weld operation was completed connecting the New End Plate to the existing top, side, diaphragm, and bottom soffit plates of the bike path box panel, this QA Inspector observed QC Inspector Mr. Bernie Docena perform a visual inspection of the PJP groove weld to verify the weld quality. The weld quality visually appeared to be in general compliance with AWS D1.5-2002 Section 3.6 and 6.26.

This QA Inspector also witnessed the magnetic particle test (MT) inspection on 10% of the length of weld connecting the New End Plate to the bike path box panel using the yoke method in conformance with ASTM E709 and to the acceptance standards of AWS D1.5-2002 Section 6.26.

The 100% visual inspection and the 10% MT performed by Quality Control Inspector Mr. Bernie Docena and witnessed by this QA Inspector on the New End Plate connecting the top plate, side plate, diaphragm plate, and bottom soffit plate of the bike path box panel at expansion joint Hinge "D" appeared to be in general compliance with ASTM E709, AWS D1.5 - 2002 Section 6.26, CCO 193 and ABF Submittal number 2549 Revision 1.



Summary of Conversations:

ABF Foreman Mr. Matt Chamberlin informed this QA Inspector that the cutting back of the next bike path box panel on the Skyway portion of the SFOBB will be performed on December 21st, 2011 at expansion joint Hinge "C" in accordance with CCO 193.

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: Peterson, Art

Quality Assurance Inspector

Reviewed By: Levell, Bill

QA Reviewer