

**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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-026485**Date Inspected:** 06-Oct-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1100**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Watson Bowman ACME**Location:** Buffalo, NY**CWI Name:** Reno Davis, John Crabtree**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:** OBG**Summary of Items Observed:**

On this date, Quality Assurance Inspector (QAI) Kenneth Riley was present at the Watson Bowman Acme Corporation (WBA) facility, as requested, in Buffalo, New York to observe fabrication activities of the Seismic Expansion Joint Hinge A lanes for the San Francisco Oakland Bay Bridge (SFOBB) project.

This (QA) Inspector met with Watson Bowman Acme Corporation (WBA) Quality Control (QC) Supervisor John Miller and KTA-Tator (ABF Representative), Certified Welding Inspectors (CWI), Reno Davis (Day Shift, and Mr. John Crabtree night shift.

This QAI observed WBA welding personnel Jason Gray performing Flux Core Arc Welding (FCAW) welding on component SEI112667-CA3-2, using Hobart (Tri-Mark) TM-811N1 electrode. The weld joint was identified as a Complete Joint Penetration weld that joined the top plate to the back plate under and side plate to top plate. WBA is using WPS, FCAW-13 (CJP) TC-U4b-F and WPS FCAW-11 (Multi-pass Fillet) the parameters were checked by ABF QC and verified by QAI. They appeared to be within the specified Welding Procedure Specification's (WPS). Mr. Gray was also observed using a rose bud torch to pre-heat the areas to 93 degrees Celsius (200F). The FCAW-11 is waiting for the single pass soundness test to be passed by WBA. Contractor is proceeding at their own risk with single pass welding which they have been informed.

This QAI also observed WBA welding personnel John DiVirgillio performing Flux Core Arc Welding (FCAW) welding on component SEI112667-CA3-1, using Hobart (Tri-Mark) TM-811N1 electrode. The weld joint was identified as a Complete Joint Penetration weld that joined the Back plate to the bottom plate under, TC-U4b-F under WPS FCAW-13 (CJP) and stiffener to top plate with a 10mm fillet weld under WPS FCAW-11 (Multi-pass Fillet). Also noted was that WBA welder DiVirgillio had performed welding on the stiffeners to bottom plate with

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## WELDING INSPECTION REPORT

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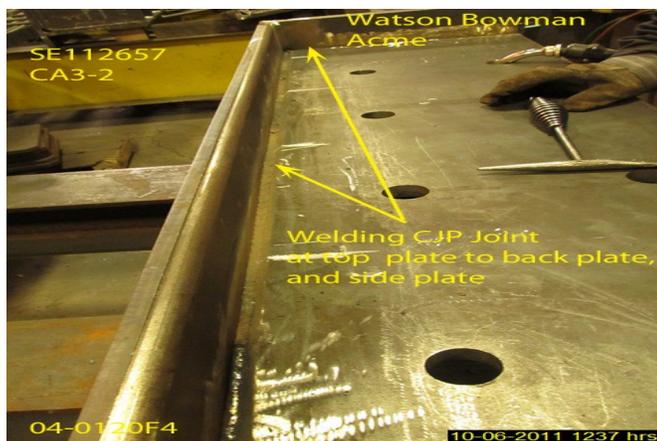
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a Partial Joint Penetration weld (PJP) with joint detail TC-P5-F as outlined in the revised drawings (revision 11). As of this date WBA does not have an approved WPS for this joint detail. A TL-15 was generated for this discrepancy. WBA is welding at their own risk. Mr. DiVirgillio was also observed using a rose bud torch to pre-heat the areas to 93 degrees Celsius (200F). The FCAW-11 is waiting for the single pass soundness test to be passed by WBA. Contractor is proceeding at their own risk with single pass welding which they have been informed.

All CJP welds were back gouged to visual sound metal and verified by ABF QC prior to performing the welding operations.

This QAI spoke with WBA concerning the removal and transportation of sixteen (16) CA2 top plates that had been previously rejected by WBA due to the 39.5mm holes had been flame cut by WBA sub-contractor. WBA stated that they sent the to Private Sysytem for over boring. WBA stated that if Private Sysytems was able to achieve a true and acruate diminseion then WBA would submit a RFI to the department for approval.



### Summary of Conversations:

Basic conversation, fundamental to completion of the tasks at hand, occurred between this QAI, ABF QC, and WBA personnel .

### 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.

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<b>Inspected By:</b>	Riley, Ken	Quality Assurance Inspector
<b>Reviewed By:</b>	Levell, Bill	QA Reviewer

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