

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016165**Date Inspected:** 12-Aug-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Jobsite**CWI Name:** See below**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:** SAS OBG**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance Inspector (QAI) Bert Madison was present at Yerba Buena Island in California between the times noted above for observations relative to the work being performed by American Bridge/Fluor Enterprises (AB/F) personnel at the locations noted below.

- 1). OBG Field Splice 2W/3W Weld ID: D1 & D2, Face A
- 2). OBG Field Splice 4W/5W Weld ID: C1 & C2, Face A
- 3). OBG Field Splice 5W/6W Weld ID: B1, Face A & B

- 1). OBG Field Splice 2W/3W Weld ID: D1 & D2, Face A

The QAI periodically observed AB/F approved welder Fred Kaddu (ID 2188) performing repair welding per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position at Ultrasonic Testing (UT) reject areas. AB/F approved welder Kenneth Chappell (3833) was performing grinding of completed repairs. The QAI periodically observed the QC Inspector Tom Pasqualone was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1000-Repair. Work at this location was in process and appeared to be in general compliance with contract documents.

- 2). OBG Field Splice 4W/5W Weld ID: C2, Face A

The QAI periodically observed AB/F approved welder Song Tao Huang (ID 3794) performing welding per the Flux Cored Arc Welding (FCAW-G) process in the 3G (vertical) position of fill and cover passes on weld ID: C2. The QAI observed QC Inspector Tony Sherwood was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified

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## WELDING INSPECTION REPORT

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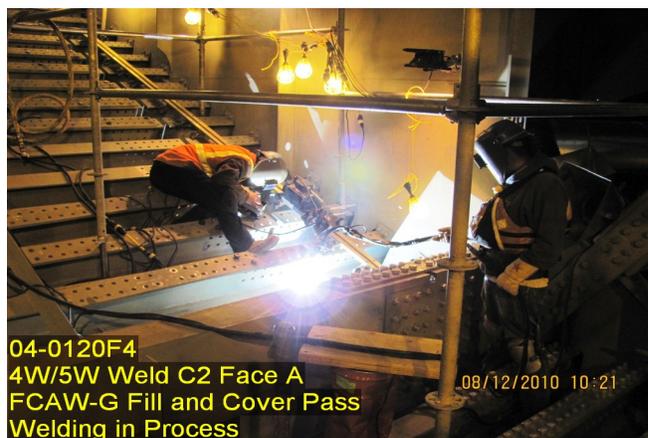
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as ABF-WPS-D1.5-3042B-1. The QC Inspector stated that the welding amperes were measured at 250 amps, the welding volts were 21.4 volts and the travel speed was measured to be 240 mm/min. The work at this location was in process for the duration of the QA Inspectors shift and appeared to be in general compliance with contract documents. See photo below.

### 3). OBG Field Splice 5W/6W Weld ID: B1, Face A & B

The QAI periodically observed AB/F approved welder Hua Qiang Hwang (2930) performing welding per the SMAW process in the 3G (vertical) position. The welding was being performed to complete the bottom 50mm of the weld B1. The QAI observed that a section of backing bar material was tacked in place on the B face of B1 adjacent to the weld C1. See photo below. The QAI periodically observed as welder Hua Qiang Hwang performed welding from the A Face and then performed air carbon arc gouging to remove the backing bar from the B face and perform subsequent SMAW to complete the welding of the complete joint penetration (CJP) splice weld. The QAI observed QC Inspector Tony Sherwood was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1040A. See Summary of Conversations. Work at this location was in process for the duration of the QA Inspectors shift and appeared to be in general compliance with contract documents.



### Summary of Conversations:

From item 3).

The QC technician Tony Sherwood in a conversation with the QAI stated that when welder Hua Qiang Hwang finished welding at OBG Field Splice 5W/6W Weld ID: B1 the welder was going to move to OBG Field Splice 5W/6W Weld ID: F1 to perform the same operation and also continue with OBG Field Splice 4W/5W Weld ID: B1 & F1 until all of these edge plates were completed and QC UT could be performed.

### 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) 813 3677, who represents the Office of Structural Materials for your project.

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**Inspected By:** Madison, Bert

Quality Assurance Inspector

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**Reviewed By:**      Levell,Bill

QA Reviewer