

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 #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018765**Date Inspected:** 20-Dec-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 8E/9E Weld ID: C2, Face A (SMAW)
- 2). OBG Field Splice 7E/8E Weld ID: E1 & E2, Face A – (SMAW R-1 Repairs)
- 3). Longitudinal Stiffeners (ALS) Splice at OBG Field Splice 8E/9E (SMAW)
- 4). OBG Field Splice 7E/8E Weld ID: B1 (SMAW)
- 5). OBG Field Welding of East Line Lifting Rod Access Penetration Inserts (SMAW)
- 6). OBG East Line Access Penetration Insert Longitudinal Stiff. (LSE) Splice at 8E PP61.5 E2
- 7). OBG Field Splices of Longitudinal Stiffeners (QA verification)

- 1). OBG Field Splice 8E/9E Weld ID: C2, Face A (SMAW)

The QAI periodically observed AB/F approved welder Song Tao Huang (ID 3794) performing welding of cover passes at the last 1000mm of OBG Field Splice 8E/9E Weld ID: C2. The welding was performed per the Shielded Metal Arc Welding (SMAW) process in the 3G (vertical) position. The QAI observed QC Inspector Fred Von Hoff was present periodically 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. The welding of cover passes was completed. The QAI observed that the work at this location appeared to be in general compliance with contract documents.

- 2). OBG Field Splice 7E/8E Weld ID: E1, Face A – (SMAW R-1 Repairs)

The QAI periodically observed AB/F approved welder Fred Kaddu (ID 2188) performing air carbon arc gouging

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and grinding on the interior surface to prepare R-1 Ultrasonic Testing (UT) reject areas for repair welding. The QAI did not observe repair welding at this location during the QA Inspectors shift. The QAI observed that the work at this location appeared to be in general compliance with contract documents.

3). Longitudinal Stiffeners (ALS) Splice at OBG Field Splice 8E/9E (SMAW)

The QAI periodically observed AB/F approved welder Hua Qiang Hwang (ID 2930) at OBG Field Splice 8E/9E ALS-1, performing welding of root, fill and cover passes per the Shielded Metal Arc Welding (SMAW) process in the 3G (vertical) position. The welding at this location was first from the South Face which was completed and back grinding of the North face and subsequent back welding was completed. QC Inspector Fred Von Hoff was present periodically 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-D1.5-1012-3. The QAI observed that the work at this location appeared to be in general compliance with contract documents.

4). OBG Field Splice 7E/8E Weld ID: B1 (SMAW)

The QAI periodically observed AB/F approved welder Wai Kitlai (ID 2953) performing welding and grinding to repair undercut and provide the required profile at the radius transition between the edge and side plate welds. See photo below. The welding per the Shielded Metal Arc Welding (SMAW) process was in the 3G (vertical) position and in the 2F (horizontal) position. QC Inspector John Pagliero was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specifications (WPS) identified as ABF-WPS-D1.5-1040A and F1200A. The welding on the interior at this location was completed and the QAI observed that the work appeared to be in general compliance with contract documents.

5). OBG Field Welding of East Line Lifting Rod Access Penetration Inserts (SMAW)

Interior: OBG 5E PP31 E3 welds 2 & 4

The QAI periodically observed AB/F approved welder Salvador Sandoval (ID 2202)) performing back welding at OBG 5E PP315 E3 weld 4 (see photo below) and later weld 2 per the Shielded Metal Arc Welding (SMAW) process in the 4G (overhead) position. QC Inspector Steve McConnell was periodically 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-D1.5-1110B rev. 1. Welding was completed and the QAI observed that the work at this location appeared to be in general compliance with contract documents.

6). OBG East Line Access Penetration Insert Longitudinal Stiff. (LSE) Splice at 8E PP61.5 E2

The QAI periodically observed AB/F approved welder Xiao Jian Wan (ID 9677) performing welding per the Shielded Metal Arc Welding (SMAW) process in the 3G (vertical) position on the OBG East Line Access Penetration Insert LSE Splice at 8E PP61.5 E2. QC Inspectors John Pagliero and Fred Von Hoff were 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-D1.5-1012-3. The welding of fill and cover passes was completed on the South face of LSE and the QAI observed that the work at this location appeared to be in general compliance with contract documents.

7). OBG Field Splices of Longitudinal Stiffeners (QA verification)

The QAI performed verification Ultrasonic Testing (UT) of 100% of the lengths of OBG Field Splices at the following locations:

OBG Field Splice 4E/5E ALS 4 & 6.

OBG Field Splice 6E/7E ALS 1 & 2.

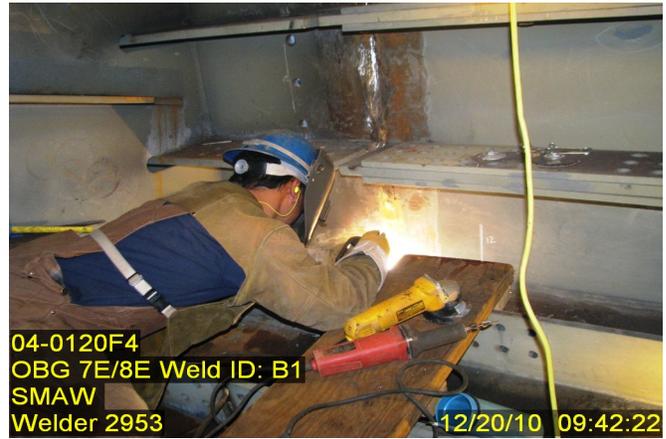
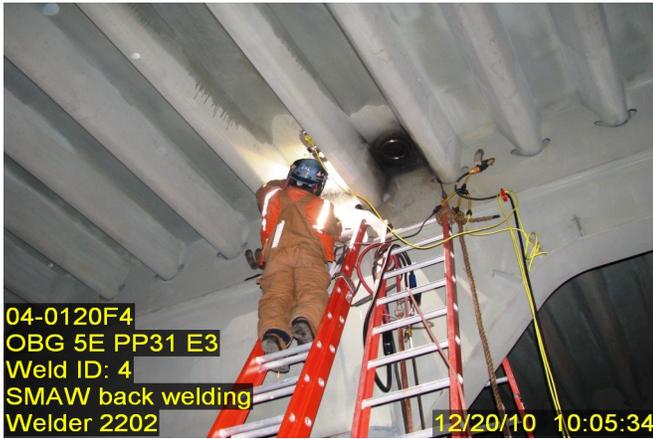
OBG Field Splice 7E/8E ALS 1, 2, 3, 4, 5 & 6.

The OBG Field Splices verified by the QAI appeared to be in general compliance with contract documents. See

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Ultrasonic Testing Report Form TL-6027 generated by the QAI on this date.



Summary of Conversations:

Conversations on this date with Quality Control Inspectors were general in nature and pertained to locations of welding and QC activities and locations of welds released to the QAI for verification testing.

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: Madison, Bert

Quality Assurance Inspector

Reviewed By: Levell, Bill

QA Reviewer