

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-019334**Date Inspected:** 14-Jan-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 730**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1200**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 of East Line Lifting Lug Hole Insert Weld (Fit-up and SMAW)
- 2). OBG Field Splice 8E/9E Weld ID: F1, Face A – (SMAW R-1 Repairs)
- 3). OBG Field Splice 9W/10W Weld ID: D1 & D2, Face A (FCAW-G & SAW)
- 4). OBG East Line Deck Access Hole (DAH) Insert Weld at 8E PP61.5 E2 (R-1 Repair SMAW)
- 5). OBG Field Splice 2E/3E Interior Radius Transition Areas @ Deck Corners (QA verification)

- 1). OBG Field Splice of East Line Lifting Lug Hole Insert Weld (Fit-up and SMAW)

Exterior: OBG 5E PP39 E4 weld 2

The QAI periodically observed AB/F approved welder Salvador Sandoval (ID 2202) performing welding from the exterior of OBG 5E PP39 E4 weld 2 per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position.

See photo below. 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-D1.5-1070. Welding was completed and the QAI observed that the work at this location appeared to be in general compliance with contract documents.

- 2). OBG Field Splice 8E/9E Weld ID: F1, Face A – (SMAW R-1 Repairs)

The QAI periodically observed AB/F approved welder Fred Kaddu (ID 2188) performing air carbon arc gouging and grinding to excavate R-1 repair areas. The QAI observed that 3 areas were identified for excavating.

Excavating was in process and the QAI did not observe welding at this location during the shift.

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3). OBG Field Splice 9W/10W Weld ID: D1 & D2, Face A (FCAW-G & SAW)

The QAI periodically observed AB/F approved welder James Zhen (ID 6001) performing welding of fill passes on weld ID: D1 & D2 per the Submerged Arc Welding (SAW) process in the 1G (flat) position. The QAI observed QC Inspector Gary Ehram 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-D1.5-4042B-1. The QAI observed that the work at this location was in process and appeared to be in general compliance with contract documents.

4). OBG East Line Deck Access Hole (DAH) Insert Weld at 8E PP61.5 E2 (R-1 Repair SMAW)

The QAI periodically observed AB/F approved welder Mick Chan (ID 9265) performing welding of R-1 repair excavation per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position on the exterior of DAH Insert Weld 8E PP61.5 E2 SW. QC Inspector Bonafacio Daquinag Jr. 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-D1.5-1001 Repair. Repair welding was in process the QAI observed the work at this location appeared to be in general compliance with contract documents. The QAI observed that the excavated areas dimensions and Y locations were as follows:

1. Y = 20mm, Depth = 16mm, Length = 100, Width = 20mm
2. Y = 150mm, Depth = 10mm, Length = 200, Width = 15mm
3. Y = 435mm, Depth = 16mm, Length = 165, Width = 18mm
4. Y = 1030mm, Depth = 16mm, Length = 270, Width = 20mm
5. Y = 2345mm, Depth = 10mm, Length = 150, Width = 15mm
6. Y = 3190mm, Depth = 16mm, Length = 150, Width = 20mm
7. Y = 3885mm, Depth = 17mm, Length = 100, Width = 17mm
8. Y = 4180mm, Depth = 17mm, Length = 170, Width = 20mm

5). OBG Field Splice 2E/3E Interior Radius Transition Areas @ Deck Corners (QA verification)

The QAI performed verification Ultrasonic Testing (UT) of the weld at the termination of the backing bar at OBG Field Splice 2E/3E, A1@E2 and A5@E5. The testing at these locations was to ensure fusion to the backing bar per RFI 2097 and attachment. The welds at the termination of the backing bar at A1/E2 and A5/E5 verified by the QAI appeared to be in general compliance with the requirements of the procedure outlined by RFI.2097.



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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
