

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-018433**Date Inspected:** 01-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1000**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1830**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: C1 & C2, Face B – (SMAW)
- 2). OBG Field Splice 8E/9E Weld ID: F1, Face B – (SMAW)
- 3). OBG Field Splice 8E/9E Weld ID: B1, Face B – (SMAW)
- 4). OBG Field Splice of East Line Access Penetration Insert Weld (QA verification)
- 5). OBG Field Welding of West Line Lifting Rod Access Penetration Insert (SMAW)
- 6). OBG Field Splice of West Line Access Penetration Insert Weld (SMAW)
- 7). OBG Field Splice 6E/7E Weld ID: D1, Face A – (SMAW R-2 Repairs)

- 1). OBG Field Splice 8E/9E Weld ID: C1 & C2, Face B – (SMAW)

The QAI periodically observed welding of fit-up gear (blank nuts) on the exterior of OBG Field Splice 8E/9E per the Shielded Metal Arc Welding (SMAW) process in the 4F (overhead) position by Approved AB/F welder Rick Clayborn (ID 2773). See photo below. 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-F1200A. Welding of blank nuts and installation of the key plates, bull pins and copper backing bar was completed. 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 B – (SMAW)

The QAI periodically observed AB/F approved welder Jorge Lopez (ID 6149) performing welding per the

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Shielded Metal Arc Welding (SMAW) process in the 2F (horizontal) and 4F (overhead) positions of the transition/radius area where F1 joins with the termination of the backing bar of A5 at OBG Field Splice 8E/9E. See photo below. QC Inspector Tony Sherwood 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-F1200A. The QAI observed that welding and grinding of the transition/radius area was completed during the shift and work at this location appeared to be in general compliance with contract documents.

3). OBG Field Splice 8E/9E Weld ID: B1, Face B – (SMAW)

The QAI periodically observed AB/F approved welder Fred Kaddu (ID 2188) performing welding per the Shielded Metal Arc Welding (SMAW) process in the 2F (horizontal) and 4F (overhead) positions of the transition/radius area B1 joins with the termination of the backing bar of A1 at OBG Field Splice 8E/9E. QC Inspector Tony Sherwood 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-F1200A. The QAI observed that welding and grinding of the transition/radius area was completed during the shift and work at this location appeared to be in general compliance with contract documents.

4). OBG Field Splice of East Line Access Penetration Insert Weld (QA verification)

3E PP23.5 E5 NE

The QAI performed verification Ultrasonic Testing (UT) of 10% of the length of the OBG Field. Splice of Access Penetration Insert Weld at 3E PP23.5 E5 NE from Y = 1000mm to Y = 1500mm. The OBG Field Splice verified by the QAI at this location appeared to be in general compliance with contract documents. See Ultrasonic Testing Report Form TL-6027 generated by the QAI on this date.

5). OBG Field Welding of West Line Lifting Rod Access Penetration Insert (SMAW)

Exterior: OBG 1W PP8.5 W3 weld 1

The QAI periodically observed AB/F approved welder Darcel Jackson (ID 9967) performing welding of fill and cover passes per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position. QC Inspector Mike Johnson 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 and flush grinding was completed and the QAI observed that the work at this location appeared to be in general compliance with contract documents.

Exterior: OBG 1W PP8.5 W4 weld 2

The QAI periodically observed AB/F approved welder Mike Jimenez (ID 4671) performing fit-up and root and fill passes per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position. QC Inspector Mike Johnson 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 in process and the QAI observed that the work at this location appeared to be in general compliance with contract documents.

6). OBG Field Splice of West Line Access Penetration Insert Weld (SMAW)

The QAI periodically observed AB/F approved welders Jin Pei Wang (ID 7299), James Zhen (ID 6001) & Mick Chan (ID 9265) performing fit-up of the Access Penetration Insert at 1W PP10.5 W5 S. Later in the shift, the QAI periodically observed AB /F approved welder Jin Pei Wang (ID 7299) performing welding of the root pass per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position from the exterior of the OBG. QC

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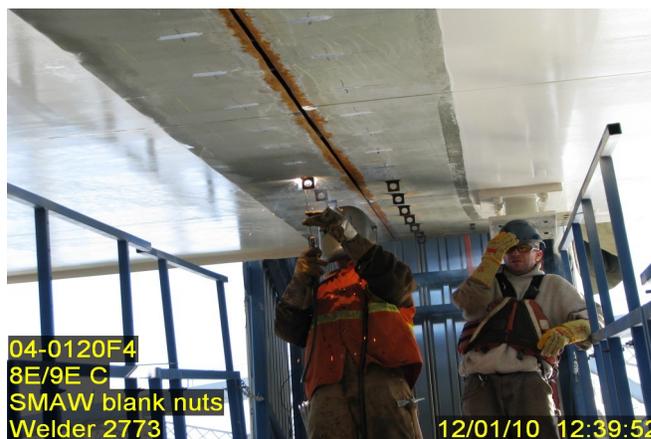
Inspector Mike Johnson was periodically present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1010 rev. 1. Welding was in process and the QAI observed that the work at this location appeared to be in general compliance with contract documents.

7). OBG Field Splice 6E/7E Weld ID: D1, Face A – (SMAW R-2 Repairs)

The QAI periodically observed AB/F approved welder Fred Kaddu (ID 2188) performing air carbon arc gouging to excavate and grinding to prepare one R-2 Ultrasonic Testing (UT) repair locations for welding. The QAI periodically observed QC Inspector Steve McConnell performing Magnetic Particle Testing (MT) of the excavated areas prior to repair welding. The QAI observed that the performance and evaluation of the MT appeared to comply with the MT procedure identified as SE-MT-CT-D1.5-101 Rev. 4. The QAI periodically observed AB/F approved welder Fred Kaddu (ID 2188) performing R-2 repair welding per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position of OBG Field Splice 6E/7E Weld: D1. QC Inspector Steve McConnell 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. The QAI observed that welder 2188 completed welding of (1) one excavation with the following dimensions at the following Y location:

Y = 630mm, Length = 130mm, Depth = 18mm and Width = 25mm.

The QAI observed that work at this location appeared to be in general compliance with contract documents.



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

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Reviewed By: Levell,Bill

QA Reviewer