

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-016857**Date Inspected:** 18-Sep-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**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 Welding of East Line Lifting Lug Rod Access Penetration Patch Welds
- 2). OBG Field Welding of East Line Personnel Access Hole Restoration
- 3). OBG Field Splice 4W/5W Weld ID: C1 & C2 - Face A (QC UT)
- 4). OBG Field Splice 4W/5W Weld ID: C1, Face A (Repair)
- 5). OBG Field Splice 5W/6W Weld E1, Face B (FCAW-G)
- 6). Hinge K Pipe Beam Lifting Lug Attachment Welding (FCAW-S)
- 7). OBG Field Splice 4W/5W Weld F1 Face B (QAI Verification)

- 1). OBG Field Welding of East Line Lifting Lug Rod Access Penetration Patch Welds

Exterior: PP27

The QAI periodically observed the welding per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position to restore the Lifting Lug Rod Access Penetrations in the A deck at PP27. The QAI observed that AB/F approved welder Darcell Jackson (ID 9967) performed welding at PP27 weld E4-2. QC Inspector Tom Pasqualone 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-D1.5-1050A. The welding was halted at this location at approximately 0900 due to inclement weather. The QAI observed that the work appeared to be in general compliance with contract documents.

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2). OBG Field Welding of East Line Personnel Access Hole Restoration

The QAI periodically observed AB/F approved welder Wai Kitlai (ID 2953) performing flush grinding of the exterior weld on the A deck between PP10 & PP11 on the Crossbeam side of OBG 1E. The QAI also periodically observed AB/F approved welder Yao Xin Liang (ID 7238) performing flush grinding of the exterior weld on the A deck between PP10 & PP11 on the Bike Path side of OBG 1E. Work was in process at these locations and appeared to be in general compliance with contract documents.

3). OBG Field Splice 4W/5W Weld ID: C1 & C2, Face A

The QAI periodically observed QC Inspector Jesse Cayabyab performing Ultrasonic Testing (UT) from the A Face (interior) of OBG Field Splice 4W/5W Weld ID: C1 & C2. The QAI periodically observed that Mr. Cayabyab utilized the UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 during the examination of the splice weld. The QC technician performed the required shear wave testing during the testing for weld soundness utilizing a .63 x .75 rectangular transducer. The UT examination was completed from face A during the QA Inspectors shift and the work at this location appeared to be in general compliance with contract documents.

4). OBG Field Splice 4W/5W Weld ID: C1 - Face A (Repair)

The QAI periodically observed AB/F approved welder Fred Kaddu (ID 2188) grinding to excavate (2) two UT rejected areas on the A face (interior) of the OBG Field Splice 4W/5W Weld ID: C1. QC Inspector Jesse Cayabyab was present to monitor the progress and verify that the excavated areas were ground to the proper depth. See photo below. At approximately 1400 hours the QC Inspector Jesse Cayabyab informed the QAI that welding of the repairs at this location would not be performed on this date. The work at this location appeared to be in general compliance with contract documents.

5). OBG Field Splice 5W/6W Weld E1, Face B (FCAW-G)

The QAI periodically observed the in process welding of OBG Field Splice 4W/5W Weld ID: E1, Face B (exterior) per the Flux Cored Arc Welding (FCAW-G) process in the 4G (overhead) position by AB/F approved welder Rory Hogan (ID 3186). QC Inspector Jim Cunningham 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-D1.5-3042A-1. The QAI observed that the work at this location appeared to be in general compliance with the contract documents. Welding was in process for the remainder of the shift.

6). Hinge K Pipe Beam Lifting Lug Attachment Welding (FCAW-S)

The QAI periodically observed the fit-up and welding of (2) two each lifting lugs to (4) four Hinge K Pipe beams per the FCAW-S process in the 2F (horizontal) position by AB/F approved welder Rick Clayborn (ID 2773). See photo below. QC Inspector Mike Johnson 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-F2200-2. Welding of lifting lugs to Hinge K Pipe Beams serial numbers 2244-001, 2244-002, 2244-003 and 2244-004 was completed during the shift. The QAI observed that the work at this location appeared to be in general compliance with the contract documents.

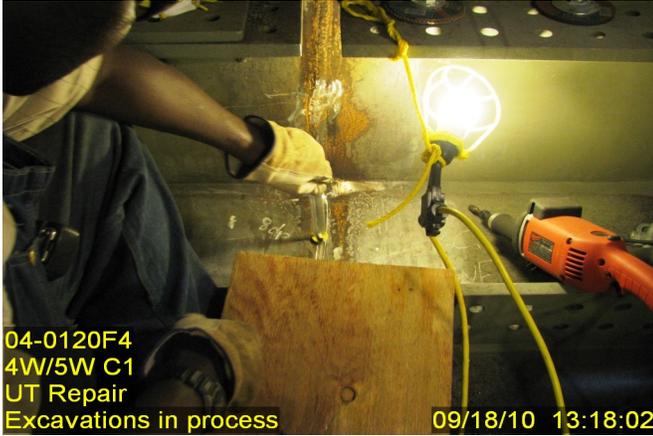
7). OBG Field Splice 4W/5W Weld F1 Face B (QAI Verification)

The QAI performed verification Visual Testing (VT) of 100%, Magnetic Particle Testing (MT) of 30% and Ultrasonic Testing (UT) of 25% of the lengths of OBG Field Splice 4W/5W Weld ID: F1. The 4W/5W Weld ID: F1 verified by the QAI appeared to be in general compliance with contract documents. See Ultrasonic Testing

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Report Form TL-6027 and Magnetic Particle Testing Report Form TL-6028 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.

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.

Inspected By: Madison,Bert

Quality Assurance Inspector

Reviewed By: Levell,Bill

QA Reviewer