DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-018400
Date Inspected: 24-Nov-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1530
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 Lifting Rod Access Penetration Inserts - (SMAW)
2). OBG Field Splice 8E/9E Weld ID: F1, Face A – (SMAW)
3). OBG Field Splice 8E/9E Weld ID: B1, Face A – (SMAW)
4). OBG Field Splice 8E/9E Weld ID: A2 & A3, Face A – (SMAW R-1 Repairs)

1). OBG Field Welding of Lifting Rod Access Penetration Insert (SMAW)
Exterior: OBG 3E-PP20-E4 – welds 1 & 2
The QAI periodically observed AB/F approved welder Salvador Sandoval (ID 2202) performing grinding of one (1) excavated area in weld 1 and one (1) excavated area in weld 2. The QAI later periodically observed R-1 repair welding of both excavated areas per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position. QC Inspector Patrick Swain 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-D1.5-1001 Repair. The QAI observed QC Inspector Pat Swain performing Magnetic Particle Testing (MT) of the excavated areas prior to back 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. Repair welding was completed and the QAI observed that the work at this location appeared to be in general compliance with contract documents.
Exterior: OBG 3-PP20-E3 - welds 3 & 4

The QAI periodically observed AB/F approved welder Mike Jimenez (ID 4671) performing grinding of two (2) excavated area in weld 3 and four (4) excavated areas in weld 4. The QAI later periodically observed R-1 repair welding of the excavated areas per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position. QC Inspector Patrick Swain 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-D1.5-1001 Repair. The QAI observed QC Inspector Pat Swain performing Magnetic Particle Testing (MT) of the excavated areas prior to back 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. Repair 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)
The QAI periodically observed AB/F approved welder Jorge Lopez (ID 6149) performing welding per the Shielded Metal Arc Welding (SMAW) process in the 3G (vertical) position of OBG Field Splice 8E/9E Weld ID: F1. 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-D1.5-1040B. The QAI observed that welding of the root passes was completed and fill pass welding was in process 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 A – (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 3G (vertical) position of OBG Field Splice 8E/9E Weld ID: B1. See photo below. 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-D1.5-1040B. The QAI observed that welding of fill passes was in process during the shift and work at this location appeared to be in general compliance with contract documents.

4). OBG Field Splice 8E/9E Weld ID: A2 & A3, Face A – (SMAW R-1 Repairs)
The QAI periodically observed AB/F approved welder Mick Chan (ID 9265) performing grinding to prepare R-1 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 Wai Kitlai (ID 2953) performing R-1 repair welding per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position of OBG Field Splice 8E/9E Welds: A2 & A3. See photo below. 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 2953 completed welding of (3) three excavations with the following dimensions at the following Y locations:

1. (A2) Indication 1) – reported at Y = 5400mm,
   Excavation Length = 85mm, Depth = 14mm and Width = 25mm.
2. (A3) Indication 1) – reported at Y = 1940mm,
   Excavation Length = 140mm, Depth = 14mm and Width = 25mm.
3. (A3) Indication 2) – reported at Y = 2560mm,

Excavation Length = 160mm, Depth = 14mm and Width = 20mm.

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

Summary of Conversations:

The QAI was informed by QC John Pagliero that the OBG Field Splice of Access Penetration Insert Transverse Stiffener at 3E PP10.5 E2 was accepted by QC and released to the QAI for verification testing.

Other 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 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