

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT**

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-028056
Date Inspected: 23-Jul-2012

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: 1730
Location: Job Site

CWI Name:	As noted 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:	Tower & OBG	

Summary of Items Observed:

Quality Assurance Inspector (QA) William Clifford was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

QA Incident Report

During random in-process observations of the fabrication of Orthotropic Box Girder (OBG) K-Plate Drop In, this Quality Assurance inspector (QA) discovered the following issues:

- ABF/JV welding personnel performing Shielded Metal Arc Welding (SMAW) without an approved Welding Procedure Specification (WPS) available for this QA to review for compliance.
- The member affected is identified as 13E-EK-SK1.

Applicable reference:

AWS D1.5-2002 section 6.3.1; The Inspector shall make certain that all WPS's are qualified in conformance with section 5 of this code. The Inspector shall make certain that each welding operation is covered by a written WPS and that such WPS's are available to the welders and Inspectors for reference.

AWS D1.5-2002 section 1.9; All production welding shall be performed in conformance with the provisions of an approved Welding Procedure Specification (WPS), which is based upon successful test results as recorded in a Procedure Qualification Record (PQR) unless qualified in conformance with 1.3.1.

In Process Visual Inspection

This QA randomly observed ABF/JV qualified welder Richard Garcia #5892 performing Shielded Metal Arc

WELDING INSPECTION REPORT

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Welding (SMAW) with 3.2mm" diameter E7018H4R electrode and implementing Caltrans unapproved Welding Procedure Specification's (WPS) ABF-WPS-D15-1072. The joint being welded was 13E-EK-SK1.

During welding, ABF Quality Control (QC) Salvador Moreno was noted monitoring the welding parameters.

Note: This QA issued a TL-15 Incident Report on this joint dated for this shift. Please see above for pertinent information.

This QA randomly observed ABF/JV qualified welder Roby Smith #1037 performing Shielded Metal Arc Welding (SMAW) with 3.2mm" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification's (WPS) ABF-WPS-D15-1010-R1. The joint being welded was DAH-5W-PP13.5-W2.

During welding, ABF Quality Control (QC) Fred Micheals was noted monitoring the welding parameters.

This QA randomly observed ABF/JV qualified welder Chau Tran #3139 performing Shielded Metal Arc Welding (SMAW) with 3.2mm" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification's (WPS) ABF-WPS-D15-1040C-CU. The joint being welded was 12E-E2.1C.

During welding, ABF Quality Control (QC) Salvador Moreno was noted monitoring the welding parameters.

Magnetic Particle Testing

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 100% of 30mm Complete Joint Penetration (CJP) weld designated as 13E/14E-LS8. This weld was previously accepted by QC Magnetic Particle technicians. This QA observed no rejectable indications at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications.

This QA Inspector tested approximately 230mm of this weld.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

Conversations were relevant to work performed.

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 SMR Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Clifford,William	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
