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

Report No: WIR-028101
Date Inspected: 03-Aug-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: 1930
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:

Electroslag Weld Excavation / Repair

This QA observed, at random intervals, ABF/JV welding personnel Wen Han Yu #6317 performing excavation of an Electroslag Weld (ESW) previously Ultrasonic Tested (UT) by Quality Control (QC) technicians.

The UT discovered indication was found to be oriented in the longitudinal position. The indication was found to be rejectable per AWS D1.5 Table 6.4).

The weld being excavated is designated as “ESW Q” and was excavated on Face B at location:
Weld “Q” - Y= 2140mm, L= 650mm, W= 75mm, D= 53mm

This QA observed, at random intervals, ABF/JV qualified welder James Zhen #6001 continue performing Flux Core Arc Welding (FCAW) implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-3000-3Repair. The joint being welded was tower shear plate designated as ESW weld, location “Q” from face B.
Weld “Q” - Y= 6450mm, L= 950mm, W= 90mm, D= 53mm

During welding, ABF Quality Control (QC) Bernard Docena was noted monitoring the welding parameters.

Orthotropic Box Girder

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-D15-1012-3. The joint being welded was a longitudinal stiffener at DAH-2W-PP13.5-W2.

During welding, ABF Quality Control (QC) Steve Jensen was noted monitoring the welding parameters.

Magnetic Particle Testing

This QA Inspector performed Magnetic Particle Testing (MT) of completed weld repair excavation on tower ESW "Q". 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.

Measurements for excavations are:

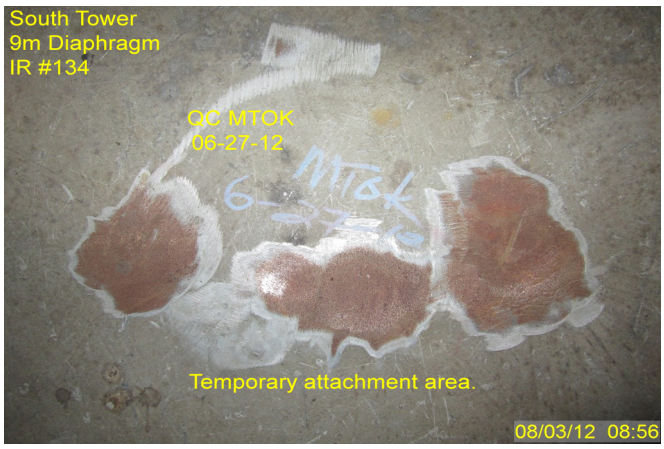
Weld "Q" - Y= 2140mm, L= 650mm, W= 75mm, D= 53mm

Magnetic Particle Testing (IR#134)

This QA Inspector performed Magnetic Particle Testing (MT) of unapproved temporary attachment area in the South Tower at the 9m diaphragm. This MT was performed as follow up testing for an Incident Report (IR) previously issued for the unapproved temporary attachment. The area was round plush prior to QC and QA performing Non Destructive Testing (NDT). QC performed MT of the ground flush temporary attachment area on 07-27-12.

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.

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.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

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