

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-028630
Date Inspected: 18-Oct-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	

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:

Ultrasonic Testing of ESW

ESW T, Face B:

This QA performed Ultrasonic Testing (UT) of Tower Electroslag Complete Joint Penetration (CJP) shear plate welds designated as "ESW T" on face B.

This weld was tested in accordance with supplemental procedure SE-UT-D1.5-CT-108-ESW-R5.

Due to safety concerns and access, testing was performed in tandem using Quality Control Technician Andrew Keech's scope. This QA observed Mr. Keech calibrate his scope and perform testing on this date.

The following indications were observed. Due to joint configuration and weld cap shape, indications observed as having a transverse orientation could not be evaluated for length or "X" location.

Y locations are recorded as:

*Note- Depths are recorded from Face A.

Indication #1: Y= 6605mm

Sizing – A=72db, B= 43db, C= 8db, D= 21db

Sound Path= 126mm, Depth= 35mm

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Indication #2: Y= 6715mm

Sizing – A=70db, B= 43db, C= 6db, D= 21db

Sound Path= 103mm, Depth= 43mm

Indication #3: Y= 6720mm

Sizing – A=72db, B= 43db, C= 12db, D= 17db

Sound Path= 182mm, Depth= 15mm

Indication #4: Y= 6805mm

Sizing – A=72db, B= 43db, C= 10db, D= 19db

Sound Path= 151mm, Depth= 26mm

Indication #5: Y= 6880mm

Sizing – A=72db, B= 43db, C= 9db, D= 20db

Sound Path= 145mm, Depth= 28mm

Indication #6: Y= 7430mm

Sizing – A=72db, B= 43db, C= 10db, D= 19db

Sound Path= 151mm, Depth= 26mm

Indication #7: Y= 7600mm

Sizing – A=72db, B= 43db, C= 8db, D= 21db

Sound Path= 124mm, Depth= 36mm

Indication #8: Y= 7605mm

Sizing – A=71db, B= 43db, C= 9db, D= 19db

Sound Path= 142mm, Depth= 29mm

ESW V, Face B:

This QA performed Ultrasonic Testing (UT) of Tower Electroslag Complete Joint Penetration (CJP) shear plate welds designated as “ESW V” on face B.

This weld was tested in accordance with supplemental procedure SE-UT-D1.5-CT-108-ESW-R5.

Due to safety concerns and access, testing was performed in tandem using Quality Control Technician Andrew Keech’s scope. This QA observed Mr. Keech calibrate his scope and perform testing on this date.

The following indications were observed. Due to joint configuration and weld cap shape, indications observed as having a transverse orientation could not be evaluated for length or “X” location.

Y locations are recorded as:

*Note- Depths are recorded form Face A.

Indication #1: Y= 110mm

Sizing – A=61db, B= 43db, C= 6db, D= 12db

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

X= -5mm, L= 40mm
Sound Path= 95mm, Depth= 45mm

Indication #2: Y= 285mm
Sizing – A=72db, B= 43db, C= 8db, D= 21db
Sound Path= 128mm, Depth= 34mm

Indication #3: Y= 290mm
Sizing – A=54db, B= 43db, C= 5db, D= 6db
X= -5mm, L= 50mm
Sound Path= 93mm, Depth= 46mm

Indication #4: Y= 380mm
Sizing – A=57db, B= 43db, C= 6db, D= 8db
X= -17mm, L= 48mm
Sound Path= 99mm, Depth= 44mm

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

Summary of Conversations:

Conversation was relevant to testing performed during this shift.

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 Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Clifford,William	Quality Assurance Inspector
----------------------	------------------	-----------------------------

Reviewed By:	Reyes,Danny	QA Reviewer
---------------------	-------------	-------------