

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-028631
Date Inspected: 19-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 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 from Face A.

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Indication #1: Y= 400mm

Sizing – A=71db, B= 43db, C= 16db, D= 12db

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Sound Path= 235mm, Depth= 4mm

Indication #2: Y= 460mm (Reject)

Sizing – A=47db, B= 43db, C= 4db, D= 0db

X= -25mm, L= 70mm

Sound Path= 73mm, Depth= 44mm

Indication #3: Y= 505mm

Sizing – A=71db, B= 43db, C= 5db, D= 23db

Sound Path= 89mm, Depth= 49mm

Indication #4: Y= 590mm

Sizing – A=61db, B= 43db, C= 8db, D= 10db

X= -22mm, L= 25mm

Sound Path= 123mm, Depth= 31mm

Indication #5: Y= 780mm

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

Sound Path= 99mm, Depth= 45mm

Indication #6: Y= 915mm

Sizing – A=71db, B= 43db, C= 7db, D= 21db

Sound Path= 108mm, Depth= 41mm

Indication #7: Y= 940mm

Sizing – A=63db, B= 43db, C= 11db, D= 9db

Sound Path= 138mm, Depth= 31mm

Indication #8: Y= 970mm

Sizing – A=66db, B= 43db, C= 8db, D= 15db

Sound Path= 123mm, Depth= 36mm

Indication #9: Y= 1020mm

Sizing – A=60db, B= 43db, C= 7db, D= 10db

Sound Path= 114mm, Depth= 39mm

Indication #10: Y= 1095mm

Sizing – A=61db, B= 43db, C= 5db, D= 13db

X= 2mm, L= 60mm

Sound Path= 92mm, Depth= 47mm

Indication #11: Y= 1350mm

Sizing – A=68db, B= 43db, C= 8db, D= 17db

Sound Path= 125mm, Depth= 35mm

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Indication #12: Y= 1445mm

Sizing – A=71db, B= 43db, C= 7db, D= 21db

Sound Path= 109mm, Depth= 41mm

Indication #13: Y= 1490mm

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

Sound Path= 124mm, Depth= 35mm

Indication #14: Y= 1540mm

Sizing – A=65db, B= 43db, C= 6db, D= 16db

Sound Path= 98mm, Depth= 45mm

Indication #15: Y= 1585mm

Sizing – A=71db, B= 43db, C= 7db, D= 21db

Sound Path= 113mm, Depth= 40mm

Indication #16: Y= 1615mm

Sizing – A=60db, B= 43db, C= 7db, D= 10db

Sound Path= 109mm, Depth= 41mm

Indication #17: Y= 1675mm

Sizing – A=66db, B= 43db, C= 9db, D= 14db

Sound Path= 139mm, Depth= 30mm

Indication #18: Y= 1705mm

Sizing – A=67db, B= 43db, C= 5db, D= 19db

Sound Path= 95mm, Depth= 46mm

Indication #19: Y= 1785mm

Sizing – A=70db, B= 43db, C= 9db, D= 18db

Sound Path= 138mm, Depth= 45mm

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Indication #1: Y= 1820mm

Sizing – A=62db, B= 43db, C= 9db, D= 10db

Sound Path= 136mm, Depth= 31mm

Indication #2: Y= 1830mm

Sizing – A=47db, B= 43db, C= 3db, D= 1db

Sound Path= 64mm, Depth= 47mm

Indication #3: Y= 1875mm

Sizing – A=59db, B= 43db, C= 6db, D= 10db

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X= -2mm, L= 40mm

Sound Path= 106mm, Depth= 42mm

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
