

**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-027850**Date Inspected:** 26-Jun-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**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 Component**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**

This QA performed Ultrasonic Testing (UT) on approximately 3440mm of Tower Electroslag Complete Joint Penetration (CJP) shear plate weld designated as "ESW G" face B. Location (Y=2450~5890) of this weld was inspected using this testing method.

This weld was previously accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3.

This QA observed six (6) recordable indications and one (1) rejectable at the time of testing. The recordable indications were recorded by QC technicians prior to QA performing this testing. This QA generated a TL-6027 UT report on this date.

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

Indication #1: Y= 2950mm

Sizing – A= 82.5db, B= 55.db, C= 8db, D= 19.5db

Sound Path= 121.1mm, Depth= 42mm

Note: This location appeared to be a grouping of two (2) or more transverse indications.

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Indication #2: Y= 2910mm

Sizing – A= 76.5db, B= 55db, C= 5db, D= 16.5db

Sound Path= 92.04mm, Depth= 32mm

Indication #3: Y= 5360mm

Sizing – A= 79.5db, B= 55db, C= 8db, D= 16.5db

Sound Path= 129.6mm, Depth= 45mm

### Magnetic Particle Testing

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 25% of 10mm fillet weld at Tower Doubler Plate designated as P1128-A1. 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 450mm of 1800mm long 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 testing 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.

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<b>Inspected By:</b>	Clifford,William	Quality Assurance Inspector
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<b>Reviewed By:</b>	Levell,Bill	QA Reviewer
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