

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-029491**Date Inspected:** 29-Apr-2013**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:** Andrew Keech, Bernie Docena**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:** SAS Tower**Summary of Items Observed:**

Caltrans Quality Assurance Inspector (QA) Joe Adame was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island 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:

Repair Verification

RWR-201304-015

ESW S043-"T":

QA observed at random intervals ABF Quality Control Inspector (QC) Andrew Keech performing Magnetic Particle Testing (MT) verification of ESW final weld repairs. Location of repair was noted as:

ESW S-043 "T" Face B

Y= 2100mm, + 300 above/below repair (1950~2350)

Repair length-260mm

Repair width-60mm

Repair depth-12mm

QA also performed a MT verification of repair surfaces & HAZ areas located 300 mm above and below of repair areas. See TL-6028 for additional information on items inspected on this date.

In Process Visual Inspection

RWR 201304-14

ESW N-041,"N"-Face A:

The QA Inspector was informed that during SMAW welding, ABF/JV welder Mike Jimenez (WID-4671) had

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observed a planar type indication in the weld repair area of ESW "N" Face A @ Y-5775, depth of 47mm. QC Inspector Andrew Keech and the QA Inspector verified the indication with MT after some grinding. The welder attempted to remove the planar indication with additional grinding, but planar and slag indications still remained. The welder and QC Inspector discussed that they would need to continue grinding to remove all indications and will exceed the maximum depth of excavation (85% of weld thickness) for the 60mm (120°tee) weld as described in the request for welding repair. The QA Inspector informed QA Lead Inspector Danny Reyes of the discrepancy and the plan of action that the contractor would take. WID-4671 performed additional excavating until the indication appeared to be removed at 55mm deep. After grinding to bright metal the QC Inspector performed MT testing of the excavation to ensure all discontinuities were removed prior to welding. The QA Inspector also performed MT inspection of the repair and did not observe any additional indications. Location of new excavation was:

ESW "N", Face A

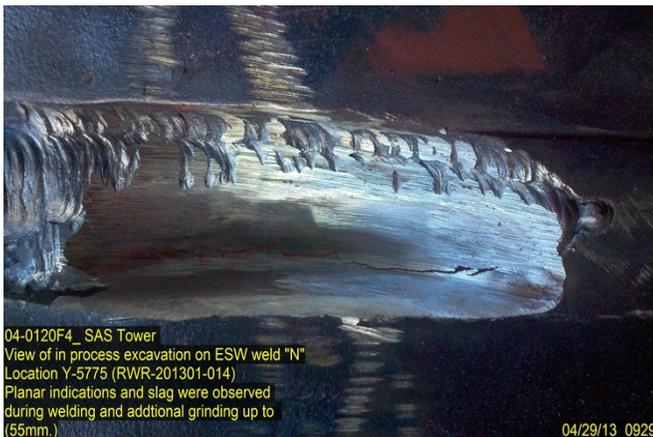
Y= (Original) 5775mm (Excavated 5600~5975)

L= 360mm

W= 50mm

D= 55mm* after acceptance

The QA/QC Inspector discussed with the welder the importance of maintaining required 300° degrees Fahrenheit preheat during welding. Welding continued on the shift and still remains in-process. *Note- ABF QC Inspector Andrew Keech issued a Non-Conformance report for Welder #4671 exceeding the maximum depth of excavation (85% of weld thickness) as per the approved RWR. Please see TL-6028 for additional details on items inspected.



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Summary of Conversations:

Only general conversations with ABF/JV QC NDT personnel relevant to testing and work 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:	Adame,Joe	Quality Assurance Inspector
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Reviewed By:	Mertz,Robert	QA Reviewer
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