

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
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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-028808  
**Date Inspected:** 03-Dec-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

<b>CWI Name:</b>	Andrew Keech and Jesse Cayabyab			<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>	
<b>Inspected CWI report:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
				<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Bridge No:</b>	34-0006			<b>Component:</b>	SAS Tower		

**Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At Tower Base Electro Slag Weld (ESW) 'G' weld joint #S-045 face A, ABF personnel was observed continuing to perform exploratory excavation on welded ESW at locations Y=2000, Y=2090, Y=2100 and Y=2210mm due to UT detected defects. The ABF personnel have resumed the exploratory excavation from 15mm deep where they left off Saturday. The personnel were noted using only the disc grinder in every 1mm increments of excavation. ABF QC Jesse Cayabyab was observed performing Magnetic Particle Testing (MT) on the following various depths with no significant indication noted so far. This QA also performed the same test and noted same result. During the shift, the ABF personnel continued the excavation in 1mm increments using the same method of test and verification up to 26mm with noted minor linear indication. The shift was completed up to this depth of excavation.

The starting depth of excavation on this date was a continuation from the previous shift. The results of the exploratory excavations are as follows;

1. 16mm in depth – no significant indication noted.
2. 17mm in depth – no significant indication noted.
3. 18mm in depth – no significant indication noted.
4. 19mm in depth – no significant indication noted.

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5. 20mm in depth – no significant indication noted.
6. 21mm in depth – 3mm linear indication noted.
7. 22mm in depth – 5mm linear indication noted.
8. 23mm in depth – 5mm linear indication noted.
9. 24mm in depth – 1mm linear indication noted.
10. 25mm in depth – no significant indication noted.
11. 26mm in depth – no significant indication noted.

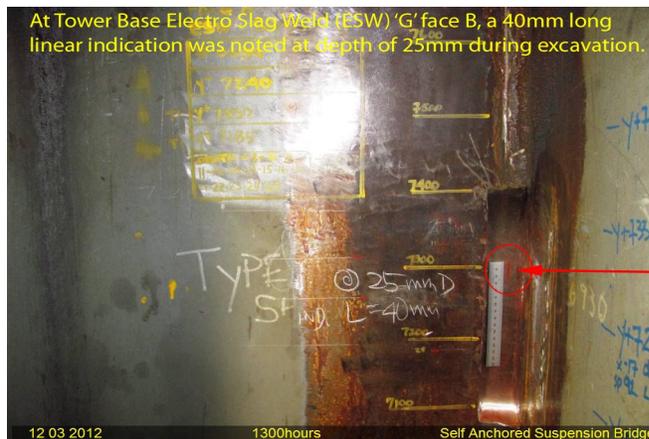
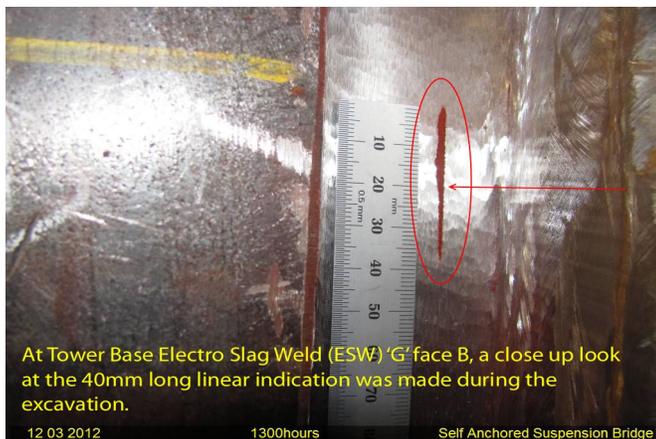
The exploratory excavations at this location will be continued on the following shift.

At Tower Base Electro Slag Weld (ESW) 'G' weld joint #S-045 face B, ABF personnel was observed continuing to perform exploratory excavation on welded ESW at locations Y=7185mm, Y=7040mm and Y=7330mm due to UT detected defects. The ABF personnel have resumed the exploratory excavation from 24mm deep where fellow QA William Clifford has turned over the QA observation. The personnel were noted using only the disc grinder in every 1mm increments of excavation. ABF QC Andrew Keech was observed performing Magnetic Particle Testing (MT) on the following various depths with noted indications. This QA also performed the same test and noted same result. During the shift, the ABF personnel continued the excavation in 1mm increments using the same method of test and verification up to 28mm with same result. The shift was completed up to this depth of excavation.

The starting depth of excavation on this date was a continuation from the previous shift. The results of the exploratory excavations are as follows;

1. 24mm in depth – 35mm linear indication noted.
2. 25mm in depth – 40mm linear indication noted.
3. 26mm in depth – 45mm linear indication noted.
4. 27mm in depth – 46mm linear indication noted.
5. 28mm in depth – 50mm linear, 5mm transverse and 3mm transverse indications noted.

The exploratory excavations at this location will be continued on the following shift.

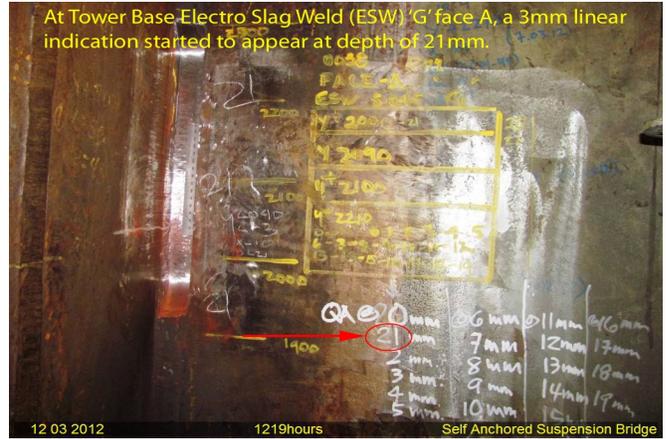
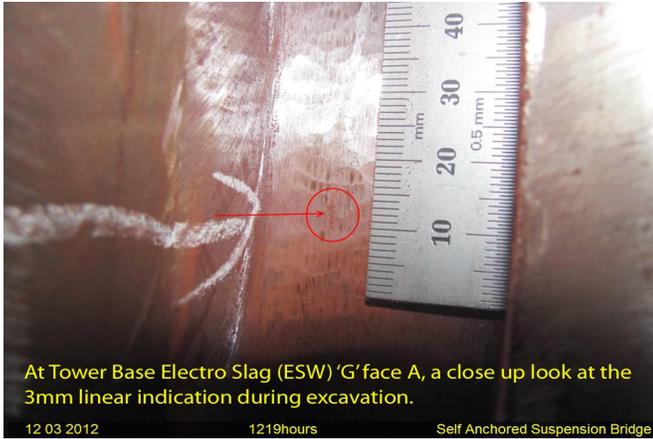


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## Summary of Conversations:

No significant conversation today.

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

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**Inspected By:** Lizardo, Joselito

Quality Assurance Inspector

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**Reviewed By:** Reyes, Danny

QA Reviewer