

**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-026437**Date Inspected:** 01-Oct-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

<b>CWI Name:</b>	Mike Johnson and William Sherwood			<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 OBG 12W/13W bottom plate 'D' outside, ABF welder Rick Clayborn was observed performing fit up of the bottom plates. The welder has tack welded blank nuts/donuts temporary attachments to both sides of the bottom plates using Shielded Metal Arc Welding (SMAW). The welder was noted welding in 4F (overhead) position utilizing 1/8" diameter E7018H4R electrode implementing Caltrans approved Welding Procedure Specification ABF-WPS-D15-F1200A. The welder was noted preheating the plate to more than 150°F prior welding. ABF QC William Sherwood was noted at site monitoring the welder and his welding parameter and so with the usage of electrode due to its limited exposure to Fracture Critical Members (FCM). During the shift, the welder has welded 27 pairs of blank nut for a total of 54 blank nuts. After the completion of the tack welding of the blank nuts, the welder has installed the backing bar by inserting the bull pins to the blank nuts and key plates. Installation of the backing bar was completed and the welder and QC went inside the OBG and started aligning the bottom plates. The alignment of the north and middle areas of the bottom plate were initially measured 0 to 3mm but the alignment at the south area was measured 0 to 4mm which could still be adjusted.

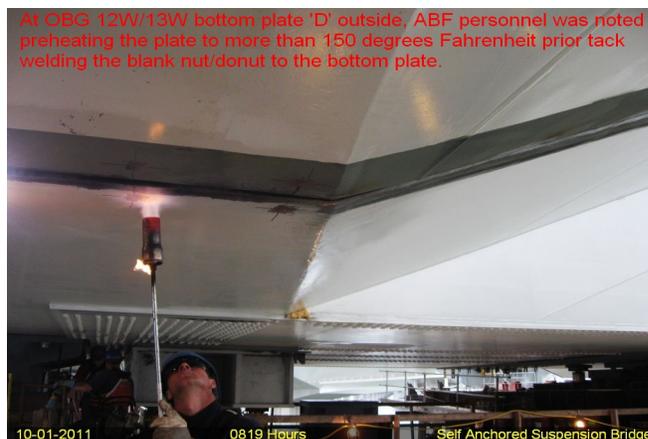
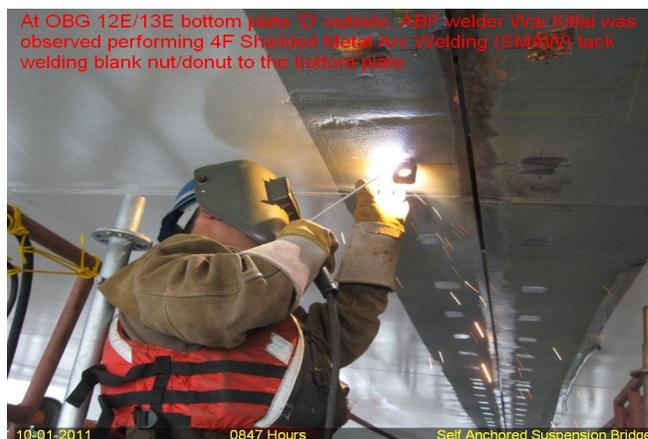
At OBG 12E/13E bottom plate 'D' outside, ABF welder Wai Kitlai was observed performing fit up of the bottom plates. The welder has tack welded blank nuts/donuts temporary attachments to both sides of the bottom plates using Shielded Metal Arc Welding (SMAW). The welder was noted welding in 4F (overhead) position utilizing 1/8" diameter E7018H4R electrode implementing Caltrans approved Welding Procedure Specification

# WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

ABF-WPS-D15-F1200A. The welder was noted preheating the plate to more than 150°F prior welding. ABF QC Mike Johnson was noted at site monitoring the welder and his welding parameter and so with the usage of electrode due to its limited exposure to Fracture Critical Members (FCM). During the shift, the welder has welded 31 pairs of blank nut for a total of 62 blank nuts. After the completion of the tack welding of the blank nuts, the welder has installed the backing bar by inserting the bull pins to the blank nuts and key plates. Installation of the backing bar was not completed during the end of the shift but should remain on Monday.

At OBG 12E/13E top deck plate 'A1' and 'A5' outside, ABF welder Xiao Jian Wan was observed performing fit up of the top deck plates. The welder has tack welded blank nuts/donuts temporary attachments to both sides of the top deck plate A1 and A5 using Shielded Metal Arc Welding (SMAW). The welder was noted welding in 2F (horizontal) position utilizing 1/8" diameter E7018H4R electrode implementing Caltrans approved Welding Procedure Specification ABF-WPS-D15-F1200A. The welder was noted preheating the plate to more than 150°F prior welding. ABF QC Fred Von Hoff was noted at site monitoring the welder and his welding parameter and so with the usage of electrode due to its limited exposure to Fracture Critical Members (FCM). During the shift, the welder has welded 11 pairs of blank nut for a total of 22 blank nuts on each A1 and A5. After the completion of the tack welding of the blank nuts, the welder has inserted the bull pins to the blank nuts and key plates. The alignment of the top deck plates was not performed due to bolting crew still installing the U rib connection plates.



## Summary of Conversations:

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# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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No significant conversation occurred 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 Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

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

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