

**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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-007722**Date Inspected:** 22-Jun-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

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

**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector George Goulet was present during the times noted above for observations relative to the work being performed.

## Trial Assembly Area

This QA Inspector, George Goulet, randomly observed the following in the side plate to side plate lap plates and bottom plate to bottom plate lap plates between panel points 25~26 of segment joint 4AW/5BW in response to Bolting Inspection Notification Sheet No. 00038.

ZPMC workers performed final bolt tightening verification at the direction of ZPMC QC Hu Mei Gang (QC1) using ZPMC calibrated wrench identified by scribing on the handle as XO2-584. No less than 10% of the ASTM A325 bolt sets at each connection were torque tested, with a minimum of one bolt set tested at each connection. QC1 provided this QA Inspector, George Goulet, with the following information regarding the bolt sets installed at this location. This QA Inspector, George Goulet, observed ZPMC's Bolt Test Log for SFOBB (RoCap list), listing the RoCap Set numbers, bolt set size, and the N.M test result for torque tightening purposes. The information presented by QC1 and listed below appeared to this QA Inspector, George Goulet, to match the RoCap list.

RC Set No. DHGM220021 – M22-2.5x65 – RoCap test result 543N.M - Installed at south side plates

RC Set No. DHGM220020 – M22-2.5x70 – RoCap test result 520N.M - Installed at bottom plates and north side plates

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The torque of the above noted bolt sets were verified by torque testing with the above noted calibrated wrench with the wrench setting displayed as 545N.M and 520N.M respectively. During torque testing, this QA Inspector, George Goulet, observed bolt sets that were obviously not previously torqued to the RoCap test result at north side plates #6 and #7, counting up from the north longitudinal diaphragm. QC1 instructed the workers to tighten every bolt on each of the two plates to the prescribed torque of 520N.M. Two complete passes were made on both ends of each plate from the center outward. This QA Inspector, George Goulet, concurred with QC1 for the issuance of green tag numbers.

## Bay 2

This QA Inspector, George Goulet, proceeded to the Bay 2 in response to a ZPMC notification of witness inspection #3497 for MT inspection of the following:

This QA Inspector, George Goulet, performed random VT and then MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector, George Goulet, generated an MT report for this date. The member is identified as FB003-160. The weld designations reviewed are as follows: 013,014, 017, 018, 025, 026, 029, 030, 037, 038, 041, 042, 049, 050, 053, 054.

This QA Inspector, George Goulet, performed random VT and then MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector, George Goulet, generated an MT report for this date. The member is identified as FB003-176. The weld designations reviewed are as follows: 013,014, 017, 018, 025, 026, 029, 030, 037, 038, 041, 042, 049, 050, 053, 054.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

As noted above and QC1 informed this QA Inspector, George Goulet, of the above noted Ro Cap bolt set numbers, bolt set sizes, locations of installation, and previously tested torque values relevant to the inspection being performed. QC1 also informed this QA Inspector, George Goulet, that Bolting Inspection Notification Sheet No's. 00039 and 00040 were cancelled because of sandblasting work being performed in the area.

### 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 Eric Tsang, 134-8257-0045, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Goulet,George	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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