

**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-013491**Date Inspected:** 18-Apr-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Gang Wai**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:** OBG COMPONENT**Summary of Items Observed:**

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

In process Inspection

Bay #14

This QA Inspector observed the following work in progress:

SMAW in the 3F position for the OBG Segment 12AW, weld No.CA3007D-001. The welder is identified as #067588. ZPMC QC is identified as Mr. Xu Tao. The welding variables recorded by QC appear to comply with WPS-B-T-4113.

FCAW in the 3F position for the OBG Segment 12AW, weld No.CA3007D-031/32. The welder is identified as #045175. ZPMC QC is identified as Mr. Xu Tao. The welding variables recorded by QC appear to comply with WPS-B-T-2133.

Ultrasonic Testing (A,B,C and D-Scan )

This QA Inspector performed Ultrasonic testing (UT) 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (UT) report for this date. The members are identified as portion Deck plate to Edge Plate corner joint at segment 7CE bike path side. This Inspection was performed after ABF UT Inspectors performed UT of this joint. The result was recorded onto a data sheet according to rejection

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criteria of “D” Scan procedure that Caltrans QA and ABF QA have jointly filled out on this date.

The Weld Designation is as follows

CA040-004

This QA Inspector performed Ultrasonic testing (UT) 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (UT) report for this date. The members are identified as portion Deck plate to Edge Plate corner joint at segment 7EW counter weight side. This Inspection was performed after ABF UT Inspectors performed UT of this joint. The result was recorded onto a data sheet according to rejection criteria of “D” Scan procedure that Caltrans QA and ABF QA have jointly filled out on this date.

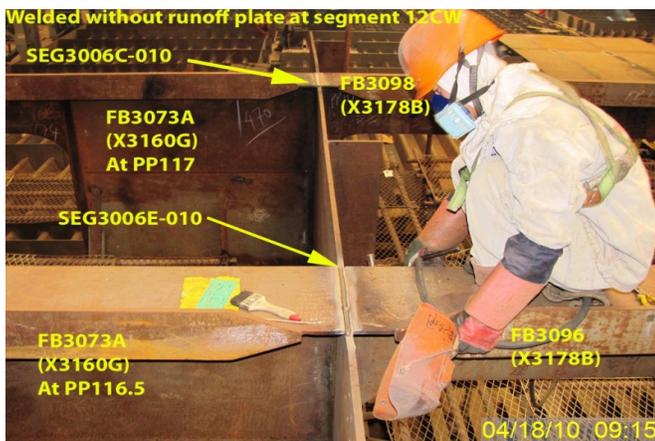
The Weld Designation is as follows

CA043-004

During Quality Assurance random in-process observations of the fabrication of segment 12CW, this Quality Assurance Inspector (QA) discovered the following issues that ZPMC was welding four (4) complete joint penetration (CJP) butt joints without utilizing Weld Tabs (Run off Plates). These CJP joints are identified as SEG3006B-007, SEG3006C-010, SEG3006D-007 and SEG3006E-010. Weld joint SEG3006B-007 joins Floor Beams FB3097A (X3178A) to FB3073A (X3160G) at panel point (PP) 117, Counter Weight side. Weld joint SEG3006C-010 joins Floor Beams FB3098A (X3178B) to FB3073A (X3160G) at PP117, Cross Beam side. Weld joint SEG3006D-007 joins Floor Beams FB3095A (X3178A) to FB3073A (X3160G) at PP116.5, Counter Weight side. Weld joint SEG3006E-010 joins Floor Beams FB3096A (X3178B) to FB3073A (X3160G) at PP116.5, Cross Beam side. The joints are designated as non Seismic Performance Critical Member (non SPCM).

This QA Inspector generated an incident report for this date.

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



## Summary of Conversations:

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No relevant conversations

## **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 150-0042-2372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Bera,Subhasis	Quality Assurance Inspector
<b>Reviewed By:</b>	Patterson,Rodney	QA Reviewer

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