

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017871**Date Inspected:** 31-Aug-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:** Gong 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:

SAW in the 1G position for the OBG Segment 13BE, weld No. SEG3009A-005. The welder is identified as #044771. ZPMC QC is identified as Mr. Wang Xu. The welding variables recorded by QC appear to comply with WPS-B-T-2221-B-L2c-S-2.

FCAW in the 2G position for the OBG Segment 13BW, weld No. CA3015-009. The welder is identified as #201222. ZPMC QC is identified as Mr. Xia Chen Hui. The welding variables recorded by QC appear to comply with WPS-B-T-2232-Tc-U4b-F.

FCAW in the 2F position for the OBG Segment 13CW, weld No. CA3016C-163/164. The welder is identified as #047866. ZPMC QC is identified as Mr. Li Mig Yang. The welding variables recorded by QC appear to comply with WPS-B-T-2132.

Bay#13

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During random visual inspection this QA inspector observed that the ZPMC personnel were performing machining at back side of the bottom plate for segment 13AW at bay#13. The bottom plate is identified as BP3074.

Magnetic Particle Testing (MPT) for Edge Beam

This Quality Assurance (QA) Inspector performed Visual inspection and verification of Magnetic Particle Testing (MT) 15% for OBG edge beam to stiffener weld. This QA inspector generated a (MT) report for this date. This area was previously tested and accepted by ZPMC QC MT technicians.

The Weld Designations are as follows

EB3032-001-001,003~005,007,008
EB3040-001-001,003,004
EB3042-001-001,003,004
EB3047-001-001,003,004
EB3037-001-001,003,004
EB3043-001-005,007,008

Ultrasonic Testing (UT) for Floor Beam

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 Floor Beam weld joints.

The welds designation reviewed are as follows:

FB3328-001-026&027
FB3321-001-001~009
FB3317-001-001~005
FB3317-001-007~009
FB3329-001-001~007
FB3329-001-009
FB3316-001-001
FB3329-001-008

During the Quality Assurance Ultrasonic Testing (UT) review of welds located on Orthotropic Box Girder (OBG) Floor Beam FB3329A, this Quality Assurance Inspector (QA) discovered the following issues One (1) longitudinal linear Class "A" rejectable indication measuring approximately 15mm in length. The indication db rating is a +7. Material thickness is 18/22mm. The depth of the indication is approximately 11.2mm. The weld is identified as FB3329-001-008. The weld is Complete Joint Penetration (CJP) butt joint. The splice joint joining between X4850B to X4848A. The weld is designated as seismic Performance Critical Material (SPCM). The indication is clearly marked on or near the weld. The Y distance for this indication is 780 mm from edge of the joint. Floor Beam FB3329A is located at bay#2. The Notice of Witness Inspection (NWIT) No. is 006542. The indication is located within an area previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC's QC personnel are required to perform hundred (100%) percent UT inspection

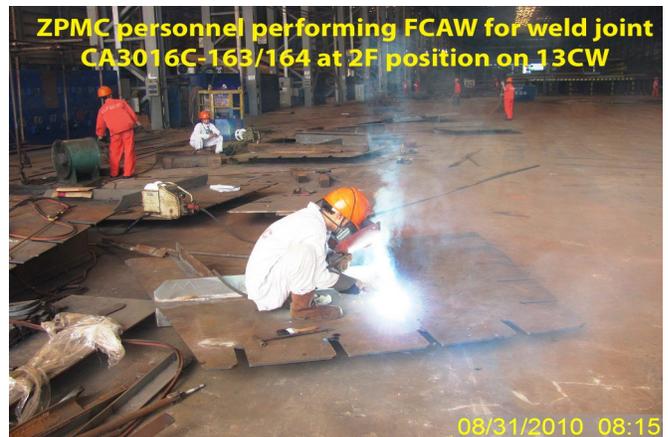
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of this weld.

The QA Inspector generated an incident report on this date.

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



Summary of Conversations:

No relevant conversations

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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.

Inspected By:	Bera,Subhasis	Quality Assurance Inspector
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Reviewed By:	Patterson,Rodney	QA Reviewer
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