

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

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-010661**Date Inspected:** 10-Dec-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	Du Zhi Qun, An Qin Xiang.	<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>	Tower Components		

**Summary of Items Observed:**

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

This QA Inspector observed the following work in progress:

Bay 10, East Tower, Lift 3.

Installing Interior Splice Plate On Skin B & C.

Bay 11, East Tower, Lift 4, BC Corner Seam.

SMAW Repair welding of weld joint ESTL4-2L/L-3B (WRR # T-WR2723); located on Bay 11, East tower, Lift 4. Welders are identified as 040669; ZPMC Quality Control Inspector (QC) is identified as An Qin Xiang. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-485-SMAW-2G(2F)-REPAIR-1.

Bay 11, West Tower, Lift 3, Pad eyes.

During random in-process inspection this Quality Assurance Inspector (QA) observed ZPMC working Grinding, Heating and Welding) at weld joints of Pad eyes on West Shaft, Lift 3. "Green Tag" has been issued for these Pad eyes on date 11-05-09(GREEN TAG # 11499). Incident Report has been written on this issue on the same date.

Bay 11, North Tower, Strut.

# WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

SMAW welding of weld joint ND1-STSA3-1-89M-1-26B, 10B; located on Bay 11, North Tower. Welders are identified as 040333, 054493; ZPMC Quality Control Inspector (QC) is identified as Du Zhi Qun. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-3212-TC-U5B-1.

Bay 11, West Tower, Lift 4, Diaphragm to Stiffener, 143M Double Diaphragm(Top).

FCAW welding of weld joint WSTL4-2I/L-26, 29; located on Bay 11, West Tower, Lift 4. Welders are identified as 221795; ZPMC Quality Control Inspector (QC) is identified as Liu Xiaozhong. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-4332-TC-P4-F.

Bay 11, East Tower, Lift 4, CD Corner Seam near 139M Double Diphragm.

During random in-process inspection; This QA inspector observed ZPMC Perssonel Excavating a Third Time Repair (R-3) on East Shaft, Lift 4, CD Corner near 139M double diaphragm. ZPMC Ultrasonic Testing(UT) Personnel Rejected this location Third time (Reference : ZPMC UT REPORT # T-787-UT-2432R3). The Repair has been performed using Approved Critical Weld Repair Report (CWR) # T-CWR478. As per ZPMC UT Report; "The Y-location" of indication is 23730mm, Indication Rating was "-1" & 70mm in depth from Surface.

ZPMC Magnetic Particle Testing(MT) Perssonel carried out MT on this Excavated area after gouging & grinding. This QA inspector observed ZPMC MT Personnel found 'Transverse Crack-like Indications' at the inspection area. Incident Report has been written on this issue on the same date.

The attached photographs provide additional detail.

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

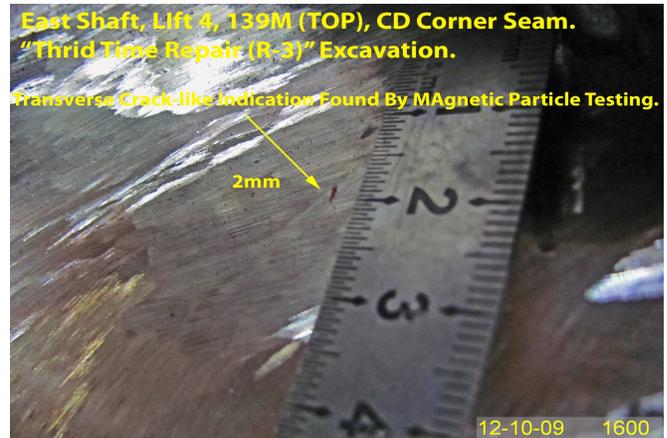
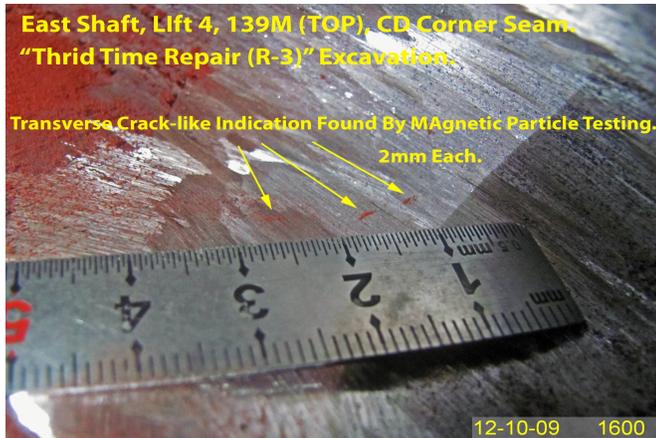


---

# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---



## Summary of Conversations:

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 Serge Sinevod, 13482570045, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Juvekar,Amit	Quality Assurance Inspector
<b>Reviewed By:</b>	Clifford,William	QA Reviewer

---