

**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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018125**Date Inspected:** 15-Nov-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) Chanxing Island**Location:** Shanghai, China**CWI Name:** Mr. Xu Tao**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 Bike Path**Summary of Items Observed:**

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

Bay 19

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW) welding of weld joint SB021-098-007 located on Suspender Bracket SB098E. ZPMC Welder is identified as 058792. ABF Quality Control (QC) is identified as Mr. Peng Wen Jun. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2232-Tc-U4b-F.

FCAW welding of weld joint SB018-098-001 located on Suspender Bracket SB098W. ZPMC Welder is identified as 062807. ABF Quality Control (QC) is identified as Mr. Peng Wen Jun. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2231-Tc-U4b-F.

FCAW welding of weld joint SB021-100-005 located on Suspender Bracket SB100E. ZPMC Welder is identified as 062788. ABF Quality Control (QC) is identified as Mr. Peng Wen Jun. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2231-Tc-U4b-F.

FCAW welding of weld joint SB021-102-001 located on Suspender Bracket SB102E. ZPMC Welder is identified as 062783. ABF Quality Control (QC) is identified as Mr. Peng Wen Jun. The welding variables recorded by QC

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appeared to comply with the Applicable WPS -B-T-2231-Tc-U4b-F.

This QA inspector observed ABF personnel performed Magnetic Particle Testing on stringer plate of the OBG Bike Path BK004B-001 and BK005A-002.

This QA inspector observed ABF personnel performed Ultrasonic Testing on Suspender Bracket SB096W, SB096E and SB0100W of lift 11.

FCAW welding of weld joint BK004A1-007-014, 015, 028, and 029 located on OBG Bike Path. ZPMC Welder is identified as 062786. ZPMC Quality Control (QC) is identified as Mr. Xu Tao. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2132.

FCAW welding of weld joint BK004A1-009-014, 015, 028, and 029 located on OBG Bike Path. ZPMC Welder is identified as 062786. ZPMC Quality Control (QC) is identified as Mr. Xu Tao. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2132.

FCAW welding of weld joint BK004A1-007-030, 031, 032, 033, 034, 035, 036, 037, 039, 040, 041 and 042 located on clip plate of OBG of Bike Path. Welder is identified as 062786. ZPMC Quality Control (QC) is identified as Mr. Xu Tao. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2132.

Description of Incident: During the Caltrans Quality Assurance in-process observations of the fabrication of Bike Path, this Quality Assurance Inspector (QA) observed that the welding at the corner of closure box (BKX35) was not continuous on the exposed ends of the closed box on each side. Shop drawing piece mark number (BKX35C) shows the location of the clipped corners. The closure box (BKX35) is welded to the bottom diaphragm plate (BKPL6A) and bearing plate (BKPL7A). The Bike Path Panels are identified as BK004A-007, BK004A-001, BK004A-010 and BK004A-003. Regarding these issues, QA informed to ZPMC Quality control personnel for corrective action. The ZPMC QC is identified as Mr. Xu Tao. This OBG Bike Path is located at Bay 19.

Description of Incident: During random Quality Assurance Visual review of welds located on OBG suspender bracket at bay 19, this Quality Assurance Inspector (QA) discovered one (1) Transverse crack measuring approximately 25 in lengths. The indications were discovered visually and confirmed by Magnetic particle Testing (MT) by Caltrans QA. ZPMC Quality Control MT Technicians claimed that magnetic particle testing have been performed on these welds that require 100% MT. The indication is clearly marked on the material near the weld. The weld is identified as SB022-104-003. This OBG Suspender Bracket is located at Bay 19. Regarding this issue, QA informed to ZPMC Quality control personnel for prepare Critical Weld Repair Report (CWR) and perform repair welding. The ZPMC QC is identified as Mr. Xu Tao. See the attached pictures.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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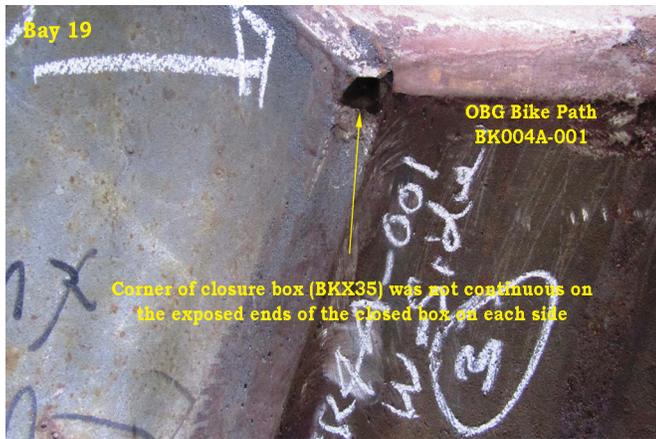
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## Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

## 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 , who represents the Office of Structural Materials for your project.

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**Inspected By:** Kumar,Vibin

Quality Assurance Inspector

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**Reviewed By:** Patel,Hiranch

QA Reviewer