

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-011653**Date Inspected:** 25-Jan-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:	N/A	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:	Orthotropic Box Girder (OBG)	

Summary of Items Observed:

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG TRIAL ASSEMBLY

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 005123

Magnetic Particle Testing (MT)

This QA performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated MT report for this date. The member is identified as OBG Crossbeam Component. The weld designations reviewed are as follows:

1. SP209-004-28, 29, 34.
2. SP207-004-135,136.
3. SP208-004-24, 25,26,28,29.
4. FB201-004-37, 38, 43~46.
5. FB202-004-13, 14.
6. SP203-004-56.
7. SP201-004-33, 35, 36.
8. SP202-004-27, 29.
9. BP204-004-05, 06.
10. BP201-004-009,010.
11. BP206-004-13~18.
12. BP205-004-005,006.
13. DP202-004-29, 30.
14. DP201-004-17, 18.

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

15. DP203-004-29, 30.

16. DP205-004-009, 010.

This QA Inspector observed the following work not in compliance:

During Quality Assurance Magnetic Particle Testing (MT) review of welds located on Cross Beam CB4, this Quality Assurance Inspector (QA) discovered the following issues:

- One (1) Transverse Linear indication measuring approximately 15 mm in length.
- The weld is identified as: DP202-004-029.
- The weld is a fillet weld joining deck plate to stiffener plate.
- One (1) Transverse Linear indication measuring approximately 15 mm in length.
- The weld is identified as: DP203-004-029.
- The weld is a fillet weld joining deck plate to stiffener plate.
- Two (2) Transverse Linear indications measuring approximately each indication 6 mm in length.
- The weld is identified as: SP203-004-056.
- The weld is a fillet weld joining deck plate to stiffener plate.
- CB4 is located near the OBG TRIAL ASSEMBLY AREA.

The Notice of Witness Inspection Number (NWIT) is 005123. The indications are located outside the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents,

ZPMC's QC personnel are required to perform 25% MT inspection of these welds.

This QA notified ZPMC QC identified as Mr. Wang Li Yang and ABF inspector identified as Mr. Zouhu of the above issue and that an incident report will be generated.

The attached photographs provide additional detail.

Applicable reference:

AWS D1.5 (02) Section 6.26.2 – “Welds that are subject to MT in addition to visual inspection shall have no cracks”.

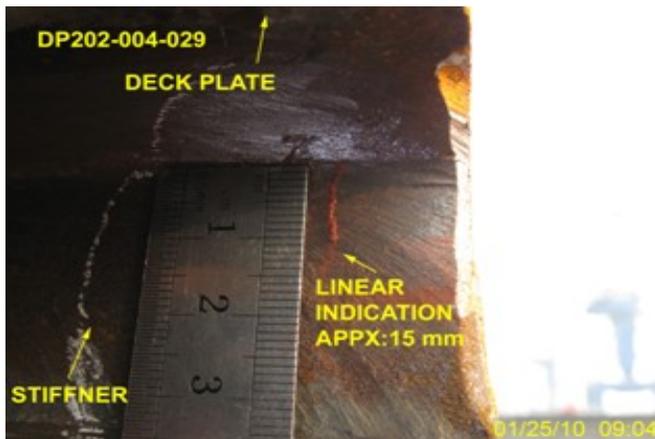
Special Provisions Section 8.3 – “Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.”

AWS D1.5 (2002) Section 6.26.1.1 - “The weld shall have no cracks.”

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

WELDING INSPECTION REPORT

(Continued Page 3 of 4)



Summary of Conversations:

Only general conversation was held between QA and Quality Control (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 Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

Inspected By: Prabhu,Surendra

Quality Assurance Inspector

Reviewed By: Miller,Mark

QA Reviewer