DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-014102
Date Inspected: 22-Mar-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name: Xu Le Feng

	Yes	No	N/A
Inspected CWI report:	☐	☑	☐
Electrode to specification:	☑	☐	☐
Qualified Welders:	☑	☐	☐
Approved Drawings:	☑	☐	☐

	Yes	No	N/A
CWI Present:	☑	☐	
Rod Oven in Use:	☑	☐	☐
Weld Procedures Followed:	☑	☐	☐
Verified Joint Fit-up:	☑	☐	☐
Approved WPS:	☑	☐	☐
Delayed / Cancelled:	☐	☑	☐

Bridge No: 34-0006
Component: Tower Components

Summary of Items Observed:

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

BAY 10

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 005403
Visual Inspection Testing (VT)
This QA inspector performed VT of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as Tower Component. The identified component and weld designations reviewed are as follows:
WEST TOWER LIFT 1 SHEARING PLATE
1. SSD1-A112A/H-1A/B

Magnetic Particle Testig (MT)
This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member is identified as Tower Component. The weld designation reviewed as follows:
WEST TOWER LIFT 1 SHEARING PLATE
1. SSD1-A112A/H-1A/B

Ultrasonic Testing (UT)
This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as Tower Component. The weld designations reviewed are as follows:
WEST TOWER LIFT 1 SHEARING PLATE – GREEN TAG # 11617
1. SSD1-A112A/H-1A/B

Shielded Metal Arc Welding (SMAW):
Weld joint # 14A located on North Tower Lift-5 at A/B Corner NSD1 – TL5– 3B/F. Welder is identified as 057258. ZPMC Quality Control (QC) Inspector is identified as Yu Zhi Lai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – B – U4b.

Weld joint # 22B located on North Tower Lift-5 at A/E Corner NSD1 – TL5– 3B/F. Welder is identified as 057258. ZPMC Quality Control (QC) Inspector is identified as Yu Zhi Lai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3212 – Tc – U5b – 1.
(See attached photo)

Flux Core Arc Welding (FCAW):
Weld joint # 49 located on North Tower Lift 4 Diagonal Plate at B/C corner NSTL4 – 3B/L. Welder is identified as 057180. ZPMC Quality Control (QC) Inspector is identified as Yuan Hui Gang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – Tc – P4 – F – 2.
(See attached photo)

Weld joint # 49 located on North Tower Lift 4 Diagonal Plate at C/D corner NSTL4 – 3B/L. Welder is identified as 066471. ZPMC Quality Control (QC) Inspector is identified as Yuan Hui Gang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – Tc – P4 – F – 2.

BAY 11

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 005398
Visual Inspection Testing (VT)
This QA inspector performed VT of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as Tower Component. The identified component and weld designations reviewed are as follows:
SPARE STRUT ANGLE PLATE
1. SD1 – A5012 – 19~36 – 1A/B
2. WD1 – A5001 – 8 – 1A/B; 17 – 1A/B; 26 – A/B
3. WD1 – A5007 – 4 – 1A/B

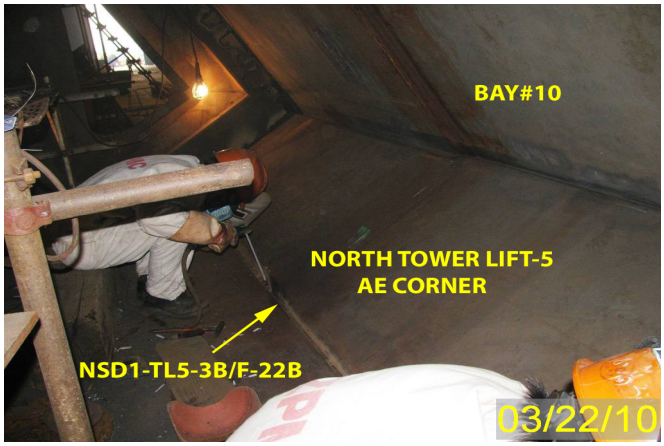
Magnetic Particle Testig (MT)
This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member is identified as

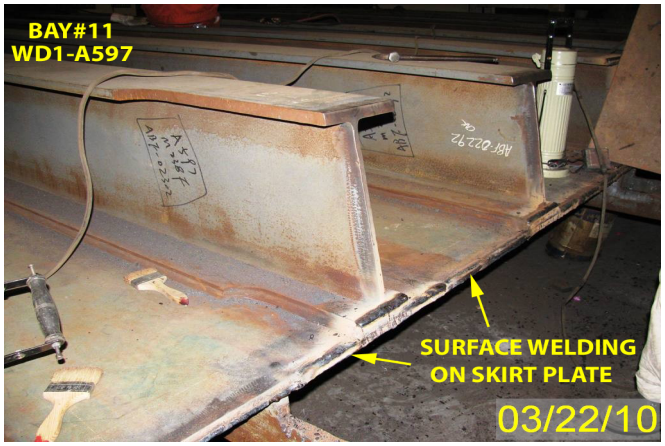
Tower Component. The weld designation reviewed as follows:
SPARE STRUT ANGLE PLATE – GREEN TAG # 11729
1. SD1 – A5012 – 19~366 – 1A/B
2. WD1 – A5001 – 8 – 1A/B; 17 – 1A/B; 26 – A/B
3. WD1 – A5007 – 4 – 1A/B

This QA Inspector observed the following work in progress:
Sub-Merged Arc Welding (SAW):
Weld joint # 2-2B located on Strut Plate ND1 – STSA4 – 6 – 143. Welder is identified as 044550. ZPMC Quality Control (QC) Inspector is identified as Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS – B – T – 4221 – B – U3C – S – 1.

Surface Welding by Flux Core Arc Welding (FCAW):
Surface welding / Weld build up being performed according to the weld repair report #T-WR3111 located on Skirt Plate # WD1-A597A. Welder is identified as 046704. ZPMC Quality Control (QC) Inspector is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS – 345 – FCAW – 2G (2F) – Repair.
(See attached photo)

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





WELDING INSPECTION REPORT

(Continued Page 4 of 4)

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 Skyler Guest - 15000422360, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer