

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-015531**Date Inspected:** 06-Jul-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:** Zhu Feng**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:** Tower & OBG 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.

TOWER JETTY

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 006140

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 designations reviewed are as follows:

WEST TOWER, LIFT-2, ELEVATOR SUPPORT SKIN-D

Z69-0B/F-14-1-W

Z69-0B/F-14-2-W

Z69-0B/F-15-1-W

Z69-0B/F-15-2-W

Magnetic Particle Testing (MT)

This QA inspector performed MT of the area previously tested and accepted by ZPMC Quality Control personnel.

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

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-2, ELEVATOR SUPPORT SKIN-D

Z69-0B/F-14-1-W

Z69-0B/F-14-2-W

Z69-0B/F-15-1-W

Z69-0B/F-15-2-W

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Repair welding of a weld joint # 13 as per the critical weld repair report-TCWR#653 located on North tower Lift-2 cross bracing connection plate to backfill plate NSD1 – SA166C/F. Welder is identified as 044511. ZPMC Quality Control (QC) Inspector is identified as Fu Wei Min. The welding variables recorded by QC appeared to comply with the WPS – 485+345 – SMAW – 4G (4F) – FCM – Repair – 2.

(See attached photo)

BAY#10

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 1B located on Lift-5 Splice Plate Stiffener SSD1 – SPSA5 – 13. Welder is identified as 052493. 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 – 3211 – Tc – U5b – 1. (See attached photo)

Weld joint # 4B located on Lift-5 Splice Plate Stiffener NSD1 – SPSA5 – 13. Welder is identified as 050289. 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 – 3211 – Tc – U5b – 1.

Flux Cored Arc Welding (FCAW):

Weld joint # 12 located on Access opening door assembly of Facade Plate WD1 – SA4 – 66 – 35. Welder is identified as 053870. ZPMC Quality Control (QC) Inspector is identified as Sun Tian Liang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

ORTHOTROPIC BOX GIRDER (OBG) LIFT-13 AT BAY#10

This QA Inspector observed the following work in progress

Flux Cored Arc Welding (FCAW):

Weld joint # 13 located on Side Plate SP3110B – 001. Welder is identified as 053870. ZPMC Quality Control (QC) Inspector is identified as Sun Tian Liang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133.

BAY#11

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

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

006133

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:

TOWER STRUT – GREEN TAG#12709

ND1 – STSA4 – 6 – 123 – 1 – 5A/B; 9A/B; 73A/B

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 1A located on Lift-5 Splice Plate Stiffener ESD1 – SPSA5 – 7. Welder is identified as 046709.

ZPMC Quality Control (QC) Inspector is identified as Shang Hai Long. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

Weld joint # 12 located on Tower Strut SD1 – STSA4 – 5 – 123M – 1. Welder is identified as 040667. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2112.

Weld joint # 2A located on Lift-5 Splice Plate Stiffener WSD1 – SPSA5 – 12. Welder is identified as 046704. ZPMC Quality Control (QC) Inspector is identified as Shang Hai Long. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

Weld joint # 2A located on Lift-5 Splice Plate Stiffener ESD1 – SPSA5 – 12. Welder is identified as 040614. ZPMC Quality Control (QC) Inspector is identified as Shang Hai Long. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

Weld joint # 1B located on Lift-5 Splice Plate Stiffener WSD1 – SPSA5 – 20. Welder is identified as 040667. ZPMC Quality Control (QC) Inspector is identified as Shang Hai Long. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

Weld joint # 24 located on Tower Strut WD1 – STSA4 – 5 – 123M – 1. Welder is identified as 044551. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2112.

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

