

**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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012912**Date Inspected:** 02-Mar-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:** Mr. You Qi Guo**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**Summary of Items Observed:**

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

**IN PROCESS INSPECTION:-****TOWER TRAIL ASSEMBLY AREA:-****EAST SHAFT LIFT 1:-**

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: ESD1-SA237D/F-1 located on Skin A Interior Bearing Stiffener. Welder is identified as 059525. ZPMC QC is identified as Mr. Yang Ming Ming. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: ESD1-SA294F/G-3 located on Skin C Interior Bearing Stiffener. Welder is identified as 040759. ZPMC QC is identified as Mr. Yang Ming Ming. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: ESD1-SA296B/E-19 located on Skin D Exterior Bearing Stiffener. Welder is identified as 040713. ZPMC QC is identified as Mr. Yang Ming Ming. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

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### WEST SHAFT LIFT 1:-

This QA inspector observed the following work in progress:

ZPMC performed Base metal repair of Interior Bearing Stiffener located on Skin A (WSD1-SA653D/F-11). The weld metal repair area is approximately 5mm depth and app.220mm length. The material is A 709M Grade 345 Non-SPCM. Welder is identified as 040690.ZPMC CWI is identified as Mr. Zhao Chen Sun. SMAW welding was performed against Critical Weld repair report T-CWR597. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-3G (3F)-Repair. Please see the attached picture below.

### NORTH SHAFT LIFT 1:-

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: NSD1-SA76-41 located on Skin E Exterior Bearing Stiffener. Welder is identified as 057266.ZPMC QC is identified as Mr. Qiu Wen. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: NSD1-SA22B/E-12 located on Skin D Exterior Bearing Stiffener. Welder is identified as 040533.ZPMC QC is identified as Mr. Qiu Wen. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: NSD1-SA17F/G-67 located on Skin C Exterior Bearing Stiffener. Welder is identified as 040261.ZPMC QC is identified as Mr. Qiu Wen. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: NSD1-SA11-28 located on Skin B Exterior Bearing Stiffener. Welder is identified as 053869.ZPMC QC is identified as Mr. Qiu Wen. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This QA inspector observed the following work in progress:

ZPMC performed Base metal repair of Interior Bearing Stiffener located on Skin D (NSD1-SA22B/E-27). The weld metal repair areas were approximately 3mm depth and app.100mm length at 3 random locations. The material is A 709M Grade 345 Non-SPCM. Welder is identified as 050289.ZPMC CWI is identified as Mr. You Qi Guo. SMAW welding was performed against Critical Weld repair report T-CWR595. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-3G (3F)-Repair. Please see the attached picture below.

### SOUTH SHAFT LIFT 1:-

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: SSD1-SA40B/E-30 located on Skin D Exterior Bearing Stiffener. Welder is

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identified as 057180.ZPMC QC is identified as Mr. Sun Zi Wang. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: SSD1-SA40B/E-35 located on Skin D Exterior Bearing Stiffener. Welder is identified as 053116.ZPMC QC is identified as Mr. Sun Zi Wang. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: SSD1-SA17F/G-61 located on Skin C Exterior Bearing Stiffener. Welder is identified as 070046.ZPMC QC is identified as Mr. Sun Zi Wang. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: SSD1-SA18-27 located on Skin B Exterior Bearing Stiffener. Welder is identified as 066763.ZPMC QC is identified as Mr. Sun Zi Wang. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

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



### Summary of Conversations:

No Relevant Conversation.

### 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.

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**Inspected By:** Pillai,Pandaram

Quality Assurance Inspector

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**Reviewed By:** Clifford, William

QA Reviewer