

**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-014397**Date Inspected:** 19-May-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. Zhao Chen Sun/Qiu wen**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.

Magnetic Particle Testing:-

TOWER TRAIL ASSEMBLY:-

SOUTH SHAFT LIFT 1:-

This QA inspector performed Magnetic Particle Testing (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 South shaft Lift 1. The weld designations reviewed are as follows:-

SSD1-SA18D/E-6,20

SSD1-A111A/H-3A/B

EAST SHAFT LIFT 1:-

This QA inspector performed Magnetic Particle Testing (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 East Shaft Lift 1 BC Corner Shear Splice Plate. The weld designations reviewed are as follows:-

ESD1-A167A/H-8A/B

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Ultrasonic Testing:-

TOWER TRAIL ASSEMBLY:-

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of the previously tested and accepted by ZPMC Quality Control Personnel. This QA Inspector generated an UT report for this date. The member is identified as Lift 1 BC Corner Shear Splice Plate. The weld designations reviewed are as follows:

ESD1-A167A/H-8A/B

SSD1-A111A/H-3A/B

IN PROCESS INSPECTION:-

TOWER TRAIL ASSEMBLY:-

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: P475-E-5 located on East Shaft Lift 1 Doubler Strut Plate at 47.6M Elevation. Welder is identified as 053316.ZPMC CWI is identified as Mr.Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS-B-T-4331-TC-P4-F. See the attached photo.

This QA inspector observed the following work in progress:

ZPMC performed Base metal repair of East Shaft Lift 1 located on Skin C Base Plate. The base metal repair area is approximately 3mm depth and 150mm length .Welder is identified as 040675.ZPMC QC is identified as Mr.Zhu Feng. SMAW welding was been performed against Temporary weld repair report. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-3G(3F)-Repair. See the attached photo.

This QA inspector observed the following work in progress:

ZPMC performed Base metal repair of South Shaft Lift 1 located on Skin C. The base metal repair areas were approximately 3mm depth and 50mm length at 4 random locations. The material is A 709M Grade 345 Non-SPCM. Welder is identified as 040675.ZPMC QC is identified as Mr.Zhu Feng. SMAW welding was been performed against Temporary weld repair report. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-3G(3F)-Repair.

BAY#11:-

This QA inspector observed the following work in progress:

SMAW welding of weld joint no: ND1-STSA4-6-143M-2-6B located on Strut Plate. Welder is identified as 044541.ZPMC QC is identified as Mr.Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS-B-T-3212-TC-U5b-1.

SMAW welding of weld joint no: ND1-STSA4-10-119M-1-9B located on Strut Plate. Welder is identified as 041271.ZPMC QC is identified as Mr.Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS-B-T-2212-TC-U5b.

This QA inspector observed the following work in progress:

SMAW welding of weld joint no: ED1-STSA4-6-135M-1-51 located on Strut Plate. Welder is identified as 206189.ZPMC QC is identified as Mr.Mao Bin Bin. The welding variables recorded by QC appeared to comply

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# WELDING INSPECTION REPORT

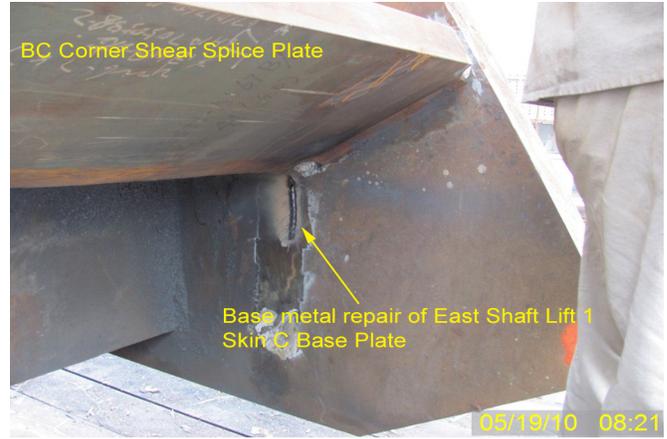
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with the WPS-B-T-2113.

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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<b>Inspected By:</b>	Pillai,Pandaram	Quality Assurance Inspector
<b>Reviewed By:</b>	Clifford,William	QA Reviewer

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