

**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-014398**Date Inspected:** 20-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**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 BC Corner Shear Splice Plate. The weld designations reviewed are as follows:-

SSD1-A111B/H-26

During random verification visual and MT inspection at South Shaft Lift 1 BC Corner Shear Splice Plate.

This Caltrans Quality Assurance (QA) Inspector discovered app.25mm length linear indication found in the Base metal and ZPMC excavated app.10mm deep and 60mm length to remove. The weld designated as #SSD1-A111B/H-27. This Shear Splice Plate has been VT, MT tested and accepted by ZPMC Quality Control personnel. The NDT Inspection Notification was issued and the Notification number is:005774. Incident report for the same has been raised. For further information, please see the attached pictures

EAST SHAFT LIFT 1:-

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## WELDING INSPECTION REPORT

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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-A167B/H-40,41

IN PROCESS INSPECTION:-  
TOWER TRAIL ASSEMBLY:-

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: SSD1-SA173-12 located on South Shaft Lift 1 Facade Plate at 33M Elevation. Welder is identified as 040302.ZPMC QC is identified as Mr.Wang Chaung Xin.The welding variables recorded by QC appeared to comply with the WPS-B-T-2131.

This QA inspector observed the following work in progress:

SMAW welding of weld joint no: SSD1-SA173-3 located on South Shaft Lift 1 Facade Plate at 23M Elevation. Welder is identified as 040582.ZPMC QC is identified as Mr.Wang Chaung Xin.The welding variables recorded by QC appeared to comply with the WPS-B-T-2114.

This QA inspector observed the following work in progress:

SMAW welding of weld joint no: SSD1-SA173-14 located on South Shaft Lift 1 Facade Plate at 38M Elevation. Welder is identified as 040280.ZPMC QC is identified as Mr.Wang Chaung Xin.The welding variables recorded by QC appeared to comply with the WPS-B-T-2114.

BAY#11:-

This QA inspector observed the following work in progress:

SMAW welding of weld joint no: ND1-STSA4-10-119M-1-7B 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-3212-TC-U5b-1.

This QA inspector observed the following work in progress:

SMAW welding of weld joint no: ND1-STSA4-6-123M-1-97 located on Strut Plate. Welder is identified as 040655.ZPMC QC is identified as Mr.Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS-B-T-2112.

This QA inspector observed the following work in progress:

SMAW welding of weld joint no: ED1-STSA4-6-143M-1-73A located on Strut Plate. Welder is identified as 044551.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.

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

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# WELDING INSPECTION REPORT

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## Summary of Conversations:

The incident report is issued for the above mentioned discrepancy observed in Tower Trail Assembly and prior to issue it was informed to ZPMC QC and ABF QA.

## 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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