

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-012543**Date Inspected:** 28-Feb-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/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 AREA:-**

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 Skin C Exterior Bearing Stiffener removal area. The weld designations reviewed are as follows:-

ESD1-SA17F/G-41

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-SA233-1 located on Skin B Interior Bearing Plate. Welder is identified as 066683. 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:

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FCAW welding of weld joint no: ESD1-SA294F/G-19 located on Skin C Interior Bearing Plate. 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 Plate. Welder is identified as 070217.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.

NORTH SHAFT LIFT 1:-

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: NSD1-SA76-44 located on Skin E Exterior Bearing Plate. Welder is identified as 066673.ZPMC QC is identified as Mr. Liu Zhi. 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-9 located on Skin D Exterior Bearing Plate. Welder is identified as 050041.ZPMC QC is identified as Mr. Liu Zhi. 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-65 located on Skin C Exterior Bearing Plate. Welder is identified as 070046.ZPMC QC is identified as Mr. Liu Zhi. 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-SA11-25 located on Skin B Exterior Bearing Plate. Welder is identified as 067184.ZPMC QC is identified as Mr. Liu Zhi. 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 E (NSD1-SA76F/H-4). 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 500331.ZPMC CWI is identified as Mr. You Qi Guo. SMAW welding was been performed against Critical Weld repair report T-CWR596. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-3G (3F)-Repair. Please see the attached picture below.

This QA inspector observed the following work in progress:

ZPMC performed Base metal repair of Interior Bearing Stiffener located on Skin C (NSD1-SA17 F/G-30). The weld metal repair areas were approximately 3mm depth and app.100mm length at 2 random locations. The material is A 709M Grade 345 Non-SPCM. Welder is identified as 500363.ZPMC CWI is identified as Mr. You Qi Guo. SMAW welding was been performed against Critical Weld repair report T-CWR594. The welding

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variables recorded by QC appeared to comply with the WPS-345-SMAW-3G (3F)-Repair.

SOUTH SHAFT LIFT 1:-

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: SSD1-SA40B/E-31 located on Skin D Exterior Bearing Plate. Welder is identified as 057180.ZPMC CWI is identified as Mr. Zhao Chen Sun. 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 Plate. Welder is identified as 053116.ZPMC CWI is identified as Mr. Zhao Chen Sun. 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-41 located on Skin D Exterior Bearing Plate. Welder is identified as 040261.ZPMC CWI is identified as Mr. Zhao Chen Sun. 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-65 located on Skin C Exterior Bearing Plate. Welder is identified as 069866.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-SA18-30 located on Skin B Exterior Bearing Plate. 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.

NORTH SHAFT LIFT 2:-

During In-process inspection in Heavy Dock Tower Trail Assembly area this Caltrans Quality Assurance (QA) Inspector covered North Tower Lift 2 Tipping. Please see the attached pictures below.

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

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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.

Inspected By: Pillai,Pandaram

Quality Assurance Inspector

Reviewed By: Clifford,William

QA Reviewer