

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-009837**Date Inspected:** 29-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Xu Yumin and Wu Zhi Cheng			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:	OBG		

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

Trail Assembly Yard

1AW+1BW

SMAW repair welding on weld joint 007 located at OBE1A side plate (exterior).

Welder is identified as Mr. Han Xiaofeng (054467). ZPMC QC is identified as Wu Zhi Cheng. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-4G (4F)-FCM-Repair-1 and CWR repair procedure #878.

Y Location of excavation by above noted welder (054467) is located at approximately 7080mm and is 540mm in length.

SMAW repair welding on weld joint 006 located at OBE1A side plate (internal).

Welder is identified as Mr. Dai Lu (048659). ZPMC QC is identified as Wu Zhi Cheng. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1 and CWR repair procedure #875.

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Y Location of excavation by above noted welder (048659) is located at approximately 8215mm and is 120mm in length.

SMAW repair welding on weld joint 006 located at OBW1 deck plate (exterior).

Welder is identified as Mr. Bi Shijian (068764). ZPMC QC is identified as Wu Zhi Cheng. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1 and CWR repair procedure #875.

Y Locations of excavations by above noted welder (068764) are located at approximately 21610mm and 21000.

1AAE+1AE

SMAW repair welding on weld joint 003 located at OBE1A deck plate (internal).

Welder is identified as Mr. Yun Chengxian (045138). ZPMC QC is identified as Wu Zhi Cheng. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1 and CWR repair procedure #868.

Y Location of excavation by above noted welder (045138) is located at approximately 3460mm and is 470mm in length.

SMAW repair welding on weld joint 003 located at OBE1A deck plate (internal).

Welder is identified as Mr. Yun Chuansheng (045221). ZPMC QC is identified as Wu Zhi Cheng. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-3G (3F)-FCM-Repair-1 and CWR repair procedure #875.

Y Location of excavation by above noted welder (045221) is located at approximately 8190mm and is 200mm in length.

NDT Observation

This QA Inspector observed ZPMC Magnetic Particle (MT) Technician performing MT on various locations in the trial assembly yard. Locations are as followed:

1AW+1BW

Excavation areas at OBW1-006 deck plate (external) weld joint on segment 1W. Y locations (pulled from counter weight side) and numbers of MT Indications observed are as followed:

1. Y location 6130mm (off counter weight side). 0 MT transverse indications observed.
2. Not performed.
3. Y location 10300mm (off counter weight side). 0 MT transverse indications observed.
4. Y location 12460mm (off counter weight side). 0 MT transverse indications observed.
5. Y location 15600mm (off counter weight side). 0 MT transverse indications observed.
6. Y location 16500mm (off counter weight side). 0 MT transverse indications observed.

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7. Y location 16720mm (off counter weight side). 0 MT transverse indications observed.
8. Y location 20100mm (off counter weight side). 3 MT transverse indications observed. (Removed transverse indications)
9. Y location 21000mm (off counter weight side). 0 MT transverse indications observed.
10. Y location 21610mm (off counter weight side). 0 MT transverse indications observed.

Miscellaneous Work In Progress

QA Inspector observed ZPMC's personnel performing various job functions in the trial assembly yard. Locations and description of work are as followed:

UT reject excavation was performed at OBW1A-007 (counter weight) side plate (external) weld joint on segment 1W. Y locations and lengths are as followed:

1. Y location 5245mm (off bottom plate) and length of excavation is approximately 140mm.
2. Y location 5705mm (off bottom plate) and length of excavation is approximately 120mm.

UT reject excavation was performed at OBW1A-004 (cross beam) side plate (external) weld joint on segment 1W. Y locations and lengths are as followed:

1. Y location 150mm (off cross beam) and length of excavation is approximately 120mm.
2. Y location 700mm (off cross beam) and length of excavation is approximately 120mm.
3. Y location 2730mm (off cross beam) and length of excavation is approximately 110mm.
4. Y location 2930mm (off cross beam) and length of excavation is approximately 120mm.
5. Y location 5600mm (off cross beam) and length of excavation is approximately 115mm.
6. Y location 7470mm (off cross beam) and length of excavation is approximately 120mm.

UT reject excavation was performed at OBE1-001 (cross beam) side plate (external) weld joint on segment 1E. Y locations and lengths are as followed:

1. Y location 2420mm (off cross beam) and length of excavation is approximately 130mm.
2. Y location 2770mm (off cross beam) and length of excavation is approximately 130mm.
3. Y location 3170mm (off cross beam) and length of excavation is approximately 190mm.
4. Y location 3520mm (off cross beam) and length of excavation is approximately 150mm.
5. Y location 4310mm (off cross beam) and length of excavation is approximately 165mm.
6. Y location 4560mm (off cross beam) and length of excavation is approximately 140mm.
7. Y location 5500mm (off cross beam) and length of excavation is approximately 400mm.
8. Y location 6190mm (off cross beam) and length of excavation is approximately 150mm.
9. Y location 7140mm (off cross beam) and length of excavation is approximately 160mm.
10. Y location 7260mm (off cross beam) and length of excavation is approximately 150mm.
11. Y location 9660mm (off cross beam) and length of excavation is approximately 165mm.
12. Y location 11440mm (off cross beam) and length of excavation is approximately 200mm.
13. Y location 13020mm (off cross beam) and length of excavation is approximately 560mm.

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Excavation on this weld seam was not completed at this time.

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

Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

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 Eric Tsang (134-8257-0045), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
