

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016564**Date Inspected:** 29-Aug-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. Huang min**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:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

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

BAY- 6

This QA Inspector Randomly observed the following work in progress:

Shielded Metal Arc Welding (SMAW) of weld joint WJF-0-168. Welder is identified as 053753. ZPMC Quality Control (QC) is identified as Mr. Xia Yong Hua. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-3312-TC-P5.

Submerged Arc Welding (SAW) of weld joint CB3002E-018-002. Welder is identified as 054458. ZPMC Quality Control (QC) is identified as Mr. Zhang zhi wei. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2221-B-L2c-S-2.

Flux Cored Arc Welding (FCAW) of weld joint FB3169-001-019. Welder is identified as 053742. ZPMC Quality Control (QC) is identified as Mr. Li Jia. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2233-TC-U4b-F.

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During random in process inspection of OBG member identified as SP3118-001 this QA observed an arc strike on Piece Mark (PCM) identified as PL3454B. This QA marked the affected area and informed ZPMC Quality Control (QC) identified as Mr. Huang min of this issue. Mr. Huang min informed this QA that the arc strike would be corrected in a manner compliant with the contract documents. Refer the attached photos for reference.

BAY- 7

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 006518.

Ultrasonic Testing (UT)

This QA performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated UT report for this date. The members are identified as OBG Cross beam CB18 Bottom plate weld Components. Total number of welds UT Tested: 05 No's. The weld designations are review as follows:

1. BP3053-001-011,022
2. BP9001-001-011,022
3. CB3002C-001-003

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 006518.

Magnetic Particle Testing (MT)

This QA performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated MT report for this date. The members are identified as OBG Cross beam CB18 Bottom plate weld Components. Total number of welds MT Tested: 05 No's. The weld designations are review as follows:

1. BP3053-001-011,022
2. BP9001-001-011,022
3. CB3002C-001-003

SMAW Tack welding of weld joint BP3097-001-001,002. Welder is identified as 049771. ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables appeared to comply with the Applicable WPS: WPS-B- P-2112-FCM.

FCAW of Steel Barrier weld joint W2-SB5-001-204,205. Welder is identified as 062447. ZPMC Quality Control (QC) is identified as Mr. Cui Jun Jie. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

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FCAW of weld joint BK004A3-061-025. Welder is identified as 500405. ZPMC Quality Control (QC) is identified as Mr. Liu Chan Gang. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2132.

FCAW of weld joint BK004A3-061-026. Welder is identified as 046706. ZPMC Quality Control (QC) is identified as Mr. Liu Chan Gang. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2132.

BAY- 9

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 006514.

UT

This QA performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated UT report for this date. The members are identified as OBG Deck plate weld Components. Total number of welds UT Tested: 10 No's. The weld designations are review as follows:

1. DP3173 (PL3486A)-001-098,101,106,109,114,117,122,125,130,133.

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 Quality Control (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 15000422372, who represents the Office of Structural Materials for your project.

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Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer