

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-013082**Date Inspected:** 25-Mar-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. Wuzhi 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:** 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:

HEAVY DOCK

LIFT:5 East-Panel Point(PP)#29~36 (Traveler Rail).

This Quality Assurance (QA) Inspector witnessed final tension verification for the Traveler Brackets at LIFT:5 East-Panel Point(PP)#29~36 (Bike Path side). Inspected 100 % (outside the segment) 10% (inside the segment) on a random basis and found the tension to be in general compliance. Inspection was performed against the ZPMC submitted Notification No. 00304 Dated: March 25, 2010.

Bolt sizes used were M20X160, RC Set# DHGM200006 and final torque value was 340 N-m, Total number of bolts: 72 No's. (Inside the segment).

Bolt sizes used were M22X120, RC Set# DHGM220083 and final torque value was 440 N-m, Total number of bolts: 80 No's. (Outside the segment).

Manual Torque wrench was been used with Sr. No. XO2-676.

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The attached photographs (Picture #1 and 2) provide additional detail

LAY DOWN YARD

SEGMENT: 9BW -Panel Point (PP) #75.

This QA Inspector performed Inspection for the Panels Upper Floor beam flange deformation measured at SEGMENT: 9BW PP#75(FL1 and FL2 Locations). The deformation was measured only at location which was susceptible. The maximum deformation measured as follows.

- The maximum Deformation was measured to be approximately 17 mm in 9000 mm Maximum template size.
- The Segment and Panel Point no is 9BW-PP#75(flange bend) Looking West at FL2 Location.

This QA generated a report on this date and submitted to the Task Leader for further action.
The attached photograph (Picture #3) provides additional detail.

SEGMENT: 9BW -Panel Point (PP) #75.

This QA Inspector performed dimension check for the Deck panel diaphragm to Upper flange edge and floor beam to upper flange edge distance for OBG SEGMENT: 9BW -Panel Point (PP) #75 at FL1 and FL2 Locations. The measured readings were data recorded, generated the report and submitted to the Task Leader.
The attached photograph (Picture #4) provides additional detail.

OBG TRIAL ASSEMBLY

This QA Inspector Randomly observed the following work in progress:

SEGMENT: 7BE

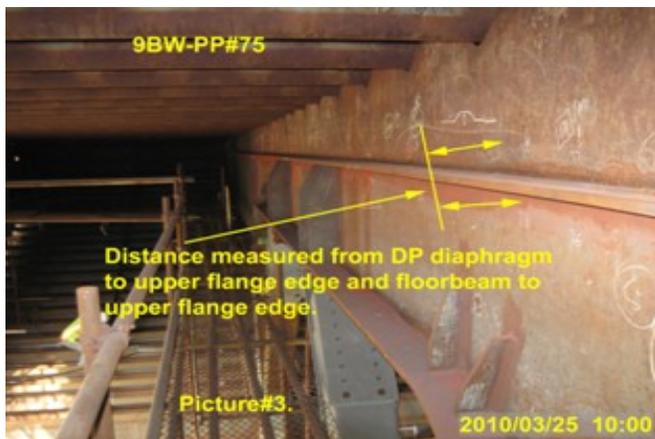
Shielded Metal Arc Welding (SMAW) welding of weld joint CA036-061. Welder is identified as 050964. ZPMC Quality Control (QC) is identified as Mr. Zhang Qiang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-P-4113-1.

Shielded Metal Arc Welding (SMAW) welding of weld joint SEG036E-054. Welder is identified as 058087. ZPMC Quality Control (QC) is identified as Mr. Zhang Qiang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-P-4113-1.

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

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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.

Inspected By: Prabhu,Surendra

Quality Assurance Inspector

Reviewed By: Miller,Mark

QA Reviewer