

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018375**Date Inspected:** 24-Nov-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:** Xu Le Feng**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 & OBG Components**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

BAY#10

ORTHOTROPIC BOX GIRDER (OBG) AT BAY#10

This QA Inspector observed the following work in progress

Fluxcored Arc Welding (FCAW):

Weld joint # 44 located on Bike Path BK004A1 – 033. Welder is identified as 056200. ZPMC Quality Control (QC) Inspector is identified as Li Jun. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2214 – B – U2.

Weld joint # 44 located on Bike Path BK004A1 – 033. Welder is identified as 052493. ZPMC Quality Control (QC) Inspector is identified as Li Jun. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2214 – B – U2.

Heat Straightening:

Heat Straightening being performed on Lift-13 OBG component identified as SP3083A-001 by oxy-acetylene flame method to remove the distortion that occurred after welding. ZPMC Quality Control (QC) Inspector is identified as Guo yan Fei present at the location. This activity appeared to comply with the Heat Straightening

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Report # HSR1 (B) – 9858.

This QA Inspector observed the following work not in compliance:

Description of Incident:

During Caltrans QA in process observations of the fabrication of Bike Path BK004A-033, this QA discovered the following issue(s):

ZPMC welding personnel did not appear to be following the NEW WELD PROCEDURE (Rager / McQuaid)

The following requirements were not followed:

6. Non Destructive testing

A B C D E F G H

X

NOTE: The above tables are relative to sections 2 ~ 6 of the NEW WELD PROCEDURE (Rager / Mc Quaid) and the corresponding paragraph letters.

The weld is identified as BK004A1-033-044.

The welding process used was Shielded Metal Arc Welding (SMAW).

The weld is a Complete Joint Penetration (CJP) joining Deck Plate (BKPL2A) to Side Plate (BKPL3B).

The weld is not SPCM.

This component is located at fabrication Bay#10.

Applicable reference:

NEW WELD PROCEDURE (Rager / McQuaid)

6. Non Destructive Testing.

A. All back gouged groove welds are to have their gouged areas ground to bright metal and inspected 100% by VT and MT examination before welding may begin from the second side.

For further information please see the below attached pictures:

BAY#11

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Repair welding of weld joint # 6A/B located on Lift-5 bracket ND1 – BRSA5 – 2 as per the weld repair report #T-WR3772. Welder is identified as 044541. ZPMC Quality Control (QC) Inspector is identified as Li Bin. The welding variables recorded by QC appeared to comply with the WPS – 485 – SMAW – 2G (2F) – Repair – 1.

Fluxcored Arc Welding (FCAW):

Weld joint # 03 located on Lift-6 Tower Head ESD1 – FDSA6 – 2. Welder is identified as 046769. ZPMC Quality Control (QC) Inspector is identified as Shang Hai Lang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

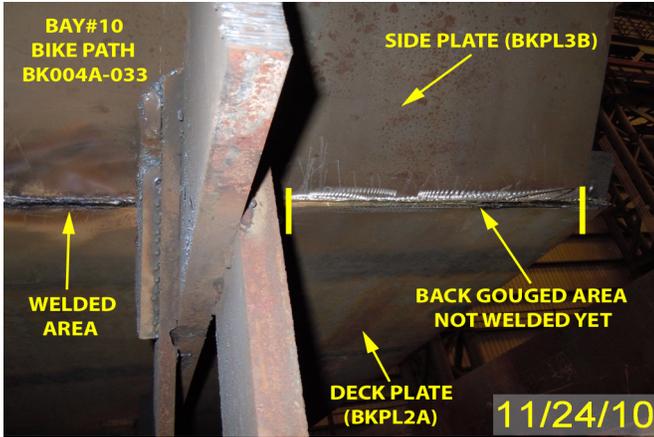
Weld joint # 04 located on Lift-6 Tower Head ESD1 – FDSA6 – 2. Welder is identified as 040704. ZPMC Quality Control (QC) Inspector is identified as Shang Hai Lang. The welding variables recorded by QC appeared

WELDING INSPECTION REPORT

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to comply with the WPS – B – T – 2132.

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



Summary of Conversations:

No Relevant Conversations.

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 Thomas Ho- 15002048250, who represents the Office of Structural Materials for your project.

Inspected By: Kumar,Sandeep

Quality Assurance Inspector

Reviewed By: Clifford,William

QA Reviewer