

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-018953**Date Inspected:** 09-Dec-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 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#11

This QA Inspector observed the following work in progress

Fluxcored Arc Welding (FCAW):

Weld joint # 09 located on Lift-6 Tower Head component WSD1 – FFSA6 – 4. Welder is identified as 040736.

ZPMC Quality Control (QC) Inspector is identified as Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2312 – ESAB.

Weld joint # 01 located on Lift-6 Tower Head component WSD1 – FFSA6 – 4. Welder is identified as 040723.

ZPMC Quality Control (QC) Inspector is identified as Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2312 – ESAB.

Weld joint # 30 located on Lift-6 Tower Head component WSD1 – FFSA6 – 4. Welder is identified as 205649.

ZPMC Quality Control (QC) Inspector is identified as Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2312 – ESAB.

WEST TOWER LIFT-5

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This QA Inspector observed the following work not in compliance:

Description of Incident:

During the Caltrans Quality Assurance (QA) in-process observation on West tower lift-5 cover plate; this QA Inspector discovered the following issue:

- ZPMC fabrication personnel removed 2 cover plates including a total four (4) Non-SPCM fillet welds without engineer notification.
- And re-welded with new cover plates, where the dimension of the cover plate does not comply with the approved drawings.
- As per the shop drawing the required length of the cover plate is 151.4 mm.
- But the length measured to be approximately 212 mm.
- Welds are fillet welds joining cover plate to skin 'E'.
- The weld designations are WSD1-TL5-4F/F#13; 14; 15; 16.
- This component located at fabrication Bay#11.

Applicable reference:

AWS D1.5 2002 Section 3.7.5: "The Engineer shall be notified before improperly fitted and welded members are cut apart".

Approved Shop Drawing: "WSD1-TL5-4F-F".

For further information see attached pictures:

NORTH TOWER LIFT-5

This QA Inspector observed the following work not in compliance:

Description of Incident:

During the Caltrans Quality Assurance (QA) in-process observation on North tower lift-5 Cover plate, this QA Inspector discovered the following issue:

- ZPMC fabrication personnel removed 2 cover plates including a total four (4) Non-SPCM fillet welds without engineer notification.
- And re-welded with new cover plates, where the dimension of the cover plate does not comply with the approved drawings.
- As per the shop drawing the required length of the cover plate is 151.4 mm.
- But the length measured to be approximately 212 mm.
- Welds are fillet welds joining cover plate to skin 'E'.
- The weld designations are NSD1-TL5-3E/F#01; 02; 17; 18.
- This component located at fabrication Bay#11.

Applicable reference:

AWS D1.5 2002 Section 3.7.5: "The Engineer shall be notified before improperly fitted and welded members are cut apart".

Approved Shop Drawing: "WSD1-TL5-4F-F".

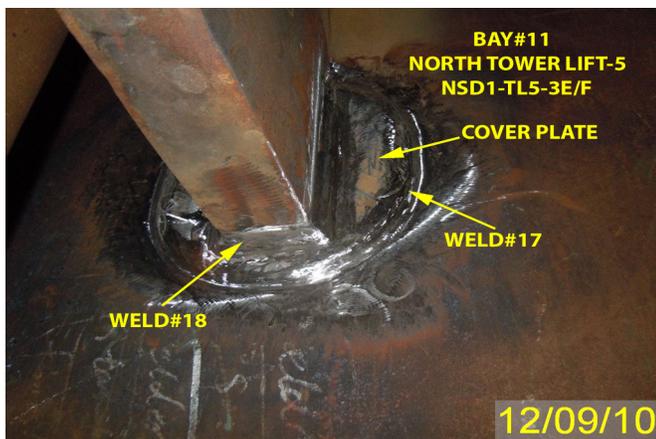
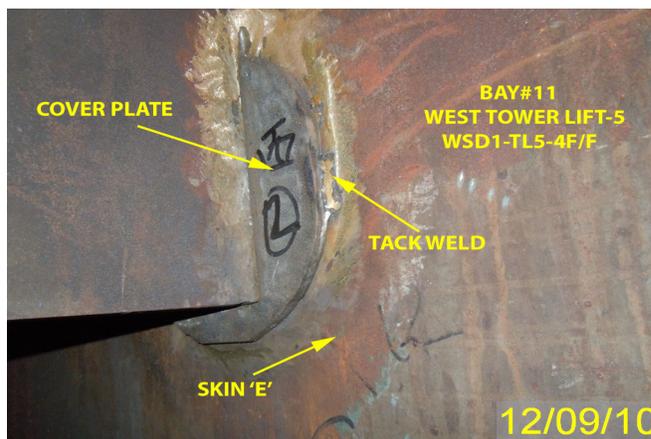
For further information see attached pictures:

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

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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