

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-019885**Date Inspected:** 31-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**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 date Caltrans OSM Quality Assurance (QA) Inspector, Kelly Leavitt, was present during the times noted above for observations relative to the work being performed.

This QA Inspector observed the following work in progress:

Bay 3

Heat straightening of PCMK, 20TR-032 under approved Heat Straightening procedure, HSR1 (B)-362. The in process temperature was approximately 250°C using a temperature indicating marker (Tempstik). The ZPMC QC was identified as Zhu Jun. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 numbers of applications was allowed. The distortion that was previously measured and recorded on the HSR was Maximum 30mm.

This QA Inspector observed the following work in progress for Bay 3.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Zhu Jun.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA Inspector.

Component; Anchor Housing

PCMK: AH3151A

Weld No: 078,079

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Welder: 050977

WPS-B-T-2133-ESAB

This QA Inspector observed the following work in progress for Bay 3.

ZPMC was using the Shielded Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Zhu Jun.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA Inspector.

Component; Side plate

PCMK: SP3079-001

Weld No: 049,051,

Welder: 058087

WPS-B-T-2213-B-U2

Bay 8

This Caltrans QA Inspector observed at random intervals ZPMC performing grinding of welds located in Bike Path, BK004A6-057 at various locations due to contour grinding and visual indications as identified by ZPMC QC Inspectors.

Bay 10

This QA Inspector observed the following work in progress for Bay 10.

ZPMC was using the Submerged Arc Welding (SAW) process.

ZPMC QC is identified as Li Guo Tam Fei.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA Inspector.

Component; Bike Path

PCMK: BK004A1-001

Weld No: 001

Welder: 040460

WPS-B-T-2221-B-L2C-S-2

Component; Bike Path

PCMK: BK004A3-001

Weld No: 004

Welder: 040460

WPS-B-T-2221-B-L2C-S-2

This Caltrans QA Inspector during random observation at ZPMC noted that back gouging was being performed using the Carbon Arc Cutting (CAC) process on BK004A1-001. Also noted at this location was ZPMC grinding these back gouge areas to a bright metal finish in preparation for the welding process as outlined in the contract documents.

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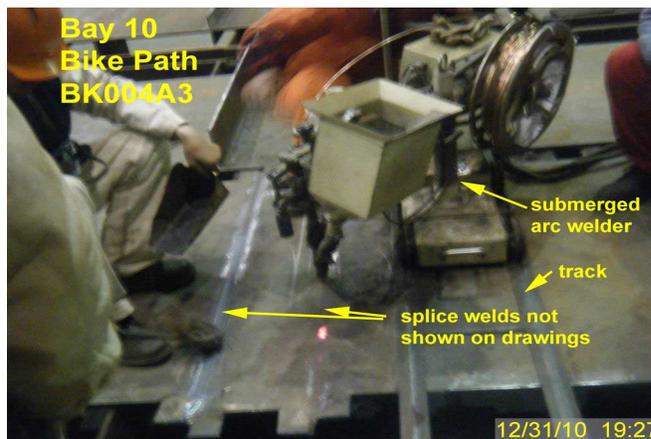
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Bay 11

This Caltrans QA Inspector observed ZPMC performing match drilling in South to East Tower Lift 5, connection plates.

This Caltrans QA Inspector observed ZPMC performing match drilling in North to West Tower Lift 5, connection plates.

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



Summary of Conversations:

No significant 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 Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Leavitt, Kelly

Quality Assurance Inspector

Reviewed By: Riley, Ken

QA Reviewer
