

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-021995**Date Inspected:** 15-Mar-2011**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:** Li Yang**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:**

On this date Caltrans Office of Structural Material (OSM) Quality Assurance (QA) Inspector, D.Sukanthan was present during the time noted above for observations relative to the work being performed.

OBG # CROSSBEAM CB17

This QA inspector received ZPMC Non Destructive Testing (NDT) notification 08548 to perform Magnetic particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control Personnel. This QA Inspector generated a Magnetic particle Test report for this date. The member is identified as Crossbeam CB17. The weld tested is identified as follows:

(SP3026-017-116,115,127,128)

(SP3025-017-015,016,023,024)

(DP3034-017-005,006)

(DP3035-017-027,028)

(DP3036-017-009,010)

(SP3027-017-022,023,024,025)

(BP3013-017-011,012)

(BP3014-017-007,008)

(BP3012-017-003,004)

This QA Inspector randomly observed the following work in progress:

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OBG # BAY1

ZPMC personnel heat straightening Orthotropic Box Girder (OBG) member identified as 20TR2-036. Distortion appeared to be caused by welding. ZPMC Quality Control (QC) inspector identified as Mr. Tian Lei was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report HSR (B)-461. See attached photos.

OBG # BAY8

This QA observed ZPMC qualified welding personnel identified as 219414 perform Flux Cored Arc Welding (FCAW) Process on weld joint BK004A6-062-070,078,088,098. ZPMC Quality Control Personnel (QC) identified as Mr. Liu chuan gang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-ESAB.

This QA observed ZPMC qualified welding personnel identified as 054459 perform Flux Cored Arc Welding (FCAW) Process on weld joint SA7535-002. ZPMC Quality Control Personnel (QC) identified as Mr. Liu chuan gang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2231-ESAB.

This QA observed ZPMC qualified welding personnel identified as 040673 perform Shielded Metal Arc Welding (SMAW) Process on weld joint BK004A5-062-003. ZPMC Quality Control Personnel (QC) identified as Mr. Liu chuan gang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2211-TC-U4C.

This QA observed ZPMC qualified welding personnel identified as 069894 perform Shielded Metal Arc Welding (SMAW) Process on weld joint BK004A3-062-003. ZPMC Quality Control Personnel (QC) identified as Mr. Liu chuan gang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2211-TC-U4C.

OBG # CROSSBEAM CB17

This QA observed ZPMC qualified welding personnel identified as 044504 perform Shielded Metal Arc Welding (SMAW) Process repair welding on weld joint CB3001A-017-016. ZPMC Quality Control Personnel (QC) identified as Mr. Li yang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-2G (2F)-FCM-Repair and Weld Repair Report B-WR20413.

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

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Summary of Conversations:

As mention above

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 150-00422372, who represents the Office of Structural Materials for your project.

Inspected By: Sukanthan,Dhanasingh

Quality Assurance Inspector

Reviewed By: Hall,Steven

QA Reviewer