

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-001230**Date Inspected:** 30-Nov-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island**CWI Name:** Chan Woo Lee**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, 77 & 114**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to observe welding operations of the Orthotropic Box Girder (OBG) fabrication and Magnetic Particle Testing (MT) of the 89.00 meter mock-up, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Caltrans QA Inspector was informed by ZPMC QC Shen Xue Jun that Ultrasonic testing was to be performed in bay # 3 on OBG components. When QA inspector arrived at 0815 testing was complete and accepted by ZPMC QC Ms. E Shuqin. Test results were recorded on the part in white marker. Acceptance of the weld was not placed on weld information tracing tag located on the part. Ultrasonic testing was performed on the splice welds BP001-01-001, BP003-01-001 and SP001-01-011. Side plate (SP) base metal thickness (18mm) and Bottom plate base metal was 20mm thick. Ms Shuqin stated testing was performed with a 0° and 70° transducers.

Caltrans QA Inspector Viars observed areas for heat straightening were marked on the 1.7 meter portion of the OBG deck plate trial. Shen Xue Jun stated ZPMC was awaiting the heat straightening request approval from Caltrans.

Caltrans QA Inspector Viars observed MT of Mock-up 89.00 Skin Plate D sub assembly MA22. Transverse cracking was noted on the root of weld # 11 at the access hole area where run off tabs were placed. ZPMC QC Mr. Xu Jun stated the cracking was located on run off tab portion of the weld and would be excavated when run off tabs were removed. Caltrans QA informed Mr. Jun the cracking may propagate into the base material and the transverse cracking should be removed prior to welding. Transverse cracking appears to be an issue carried over from tack welding. Please see the attached photo of the transverse cracking of root pass at access hole.

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Caltrans QA Inspector monitored Magnetic Particle testing and performed random visual inspection of welding .
See MT report TL 6028, generated on this date for further information.



Summary of Conversations:

As identified within the contents of this report.

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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Viars,Larry	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer
