

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-001744**Date Inspected:** 04-Mar-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1830**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhao Chen Sun**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:** deck panel**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Mike Hasler was present to observe the fitup, welding and related activities associated with the fabricating of Caltrans Mock-up, 77M, 89M, 114M and orthotropic box girders (OBG), for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Item Description	WBS	Dwg No.	Status
1 deck panel	na	na	VT

OBG Bay 1: Caltrans QA Inspector performed visual inspection of the completed submerged arc welding (SAW) cover pass welds; partial joint penetration (PJP) welds joining the closed ribs to deck plate panel DP028-001, u-rib U60, welds 1 & 2; u-rib U63, welds 3 & 4; u-rib U45, welds 5 & 6, DP071-001 u-rib U32, welds 1 & 2; u-rib U30 welds 3 & 4; u-rib welds 5 & 6; u-rib welds 7 & 8; u-rib welds 9 & 10. Caltrans QA observed welds with overlap, underfill and incomplete fusion. These indications observed at the weld were marked in yellow paint stick along the distance from the "Y" axis of the weld, starting at the weld start to the weld completion end. The weld indications observed were recorded on Caltrans QA Visual Weld Inspection Report for the OBG Deck Panels and is on file at the OSM on-site office.

2 tower diaphragm plates	na	na	heat straightening
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Bay 4: Caltrans QA observed ZPMC shop personnel performing heat straightening of tower diaphragm plates, identified as SA287 (E), Heat Straightening Procedure HSR1 (T) -092, 23M (BTM) P306, Heat Straightening Procedure HSR1 (T) -076 and 23M Top SA333 (S), Heat Straightening Procedure HSR1 (T) -083. Caltrans QA observed QC/ CWI inspector, Mr. Zhao Chen Sun, monitoring the heat straightening activities at the work-station. Caltrans QA met with Mr. Zhao Chen Sun and requested to see the heat straightening procedures, in regards to the work that is being performed at the work-station. Mr. Zhao Chen Sun presented the procedures for review. Caltrans QA observed that the work being

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performed is in compliance. The following digital picture illustrates diaphragm plates.



- 3 tower diaphragm plate na na heat straightening
- Bay 8: Caltrans QA observed ZPMC shop personnel performing heat straightening of tower diaphragm plates, identified as 38M (BTM) SA265 (N), Heat Straightening Procedure HSR1 (T) –102 and 38M (BTM) SA348, Heat Straightening Procedure HSR1 (T) -104. Caltrans QA observed QC/ CWI inspector, Mr. Zhu Zhonghai, monitoring the heat straightening activities at the work-station. Caltrans QA met with Mr. Zhao Chen Sun and requested to see the heat straightening procedures, in regards to the work that is being performed at the work-station. Mr. Zhu Zhonghai presented the procedures for review. Caltrans QA observed that the work being performed is in compliance.

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:	Hasler, Mike	Quality Assurance Inspector
Reviewed By:	Cuellar, Robert	QA Reviewer
