

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013581**Date Inspected:** 15-Mar-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:** 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:** OBG Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 7BE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SP462-001-019. The welder is identified as #062092 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2114-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet joint. The Weld joint is designated as EP080-001-014. The welder is identified as #220063 and was observed welding in the 4F (vertical) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SEG036-049. The welder is identified as #067572 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification

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WPS-B-P-2214-TC-U4b-FCM-1.

Segment 7AE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SP461-001-029. The welder is identified as #062092 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2114-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as CA034-006. The welder is identified as #067572 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-TC-U4b-FCM-1.

This QA Inspector observed Base Metal repair using the Shielded Metal Arc Welding (SMAW) in progress at locations of removed fit up plates along the Side Plate segment splice, cross beam side. The welder is identified as #067829 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1.

Segment 7BE/7CE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as DP656-001-020. The welder is identified as #054467 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-3213-B-U3b.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as DP664-001-021. The welder is identified as #037743 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-3213-B-U3b.

Segment 7CE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet joint. The Weld joint is designated as EP079-001-027. The welder is identified as #048659 and was observed welding in the 4F (vertical) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

Segment 6AE

This QA Inspector observed grit blasting in progress on the exterior of the segment at the FL3 location.

Tower Shop-Welder Qualification

This QA Inspector observed Welder Qualifications of ZPMC personnel fillet weld break tests. The weld test

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positions were in 3F and 4F with the SMAW process.

SMAW 3F/4F

#58 Jiao An Lei 3F-Accepted / 4F-Accepted
#55 Zhu Xin Xiang 3F-Accepted / 4F-Accepted
#59 Xu Xiao Dong 3F- Failed
#57 Jia Yong Qiang 3F- Failed / 4F- Failed
#56 Huo Xiao Fei 3F- Failed / 4F-Accepted
#24 Cheng Chang Yun 4F-Accepted
#26 Wang Xiao Kun 3F/4F-Accepted
#27 Zhang Qian 3F-Accepted / 4F-Accepted
#28 Tian Chao 4F-Accepted
#29 Yang You Li 3F- Failed
#30 Wang Feng Jun 3F-Accepted / 4F-Accepted
#31 Chen Bin 3F-Accepted
#32 Bai Zhan Feng 3F- Failed
#34 Zhang Ming 3F-Accepted / 4F-Accepted
#35 Guo Zhun Bin 3F-Accepted
#36 Zhu Li Zhao 3F-Accepted
#37 Cui Zai Shun 3F-Accepted /4F-Accepted
#38 Zhang Gui Bao 3F-Accepted
#39 Zhu Fa Chao 3F- Failed / 4F-Accepted
#40 San Pang Feng 3F-Accepted
#41 Tao Wei Bing 3F-Accepted
#42 Zhu you Ling 3F-Accepted

The Welder Qualification fillet weld break tests were monitored by ZPMC CWI An Qing Xiang.

ZPMC Quality Control (QC) Inspector is identified as Zhang Hai Tao. QA Inspector observed QC Inspector verify welding parameters. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract 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 Eric Tsang, 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By: Hernandez,Dan

Quality Assurance Inspector

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Reviewed By: Carreon,Albert

QA Reviewer