DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-014319
Date Inspected: 20-May-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name:	Mr.Tian Lei /Mr. Huang min			**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:

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

BAY-1

This QA Inspector Randomly observed the following work in progress:

Flux Cored Arc Welding (FCAW) welding of weld joint 20TR2-047-017. Welder is identified as 216575. ZPMC Quality Control (QC) is identified as Mr. Xiang Feng Feng. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2232-TC-U5-F.

FCAW of weld joint 20TR2-046-011. Welder is identified as 219188. ZPMC Quality Control (QC) is identified as Mr. Xiang Feng Feng. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2232-TC-U5-F.

BAY-2

FCAW of weld joint FB3204-001-081. Welder is identified as 045240. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables recorded by QC appeared to comply with the Applicable WPS:

WPS-B-T-2232-3.

FCAW of weld joint FB3204-001-142. Welder is identified as 045203. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2232-TC-U4b-F.

BAY-3

FCAW of weld joint FB3158-001-003. Welder is identified as 050977. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2132-TC-U4b-F.

FCAW of weld joint FB3120-001-038. Welder is identified as 208035. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2132-3.

BAY-6

Submerged Arc Welding (SAW) of weld joint WJF-0-200. Welder is identified as 053748. ZPMC Quality Control (QC) is identified as Mr. Zhao Jian Hang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-3221-TC-U4a-S-1.

SAW of weld joint WJF-0-203. Welder is identified as 053748. ZPMC Quality Control (QC) is identified as Mr. Zhao Jian Hang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-3221-TC-U4a-S-1.

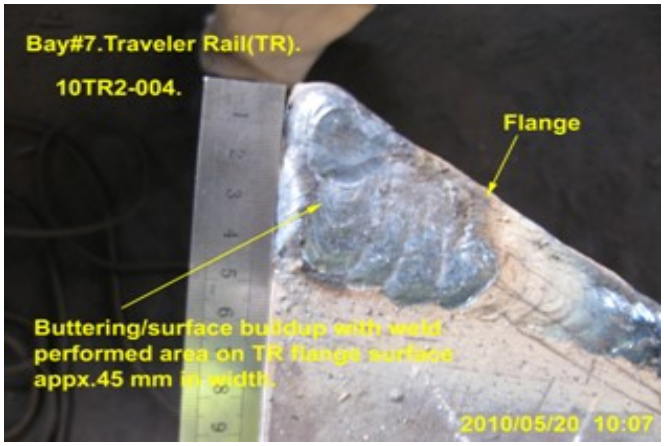
BAY-7

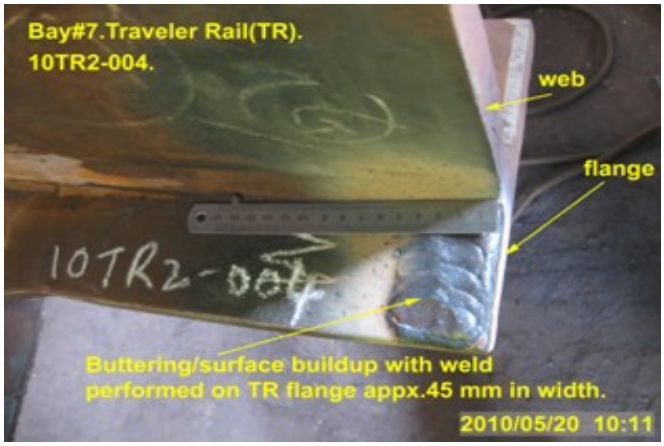
Shielded Metal Arc Welding (SMAW) Tack welding on Bottom panel weld joint BP3042-001-062. Welder is identified as 250833. ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2112.

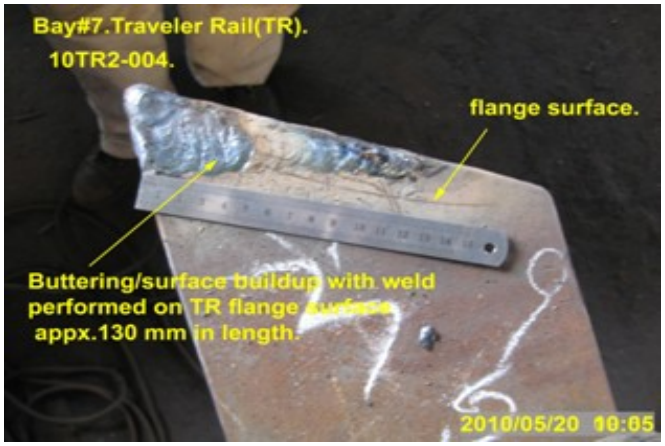
SMAW Tack welding on Bottom panel weld joint BP3048-001-048. Welder is identified as 046813. ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2112-FCM.

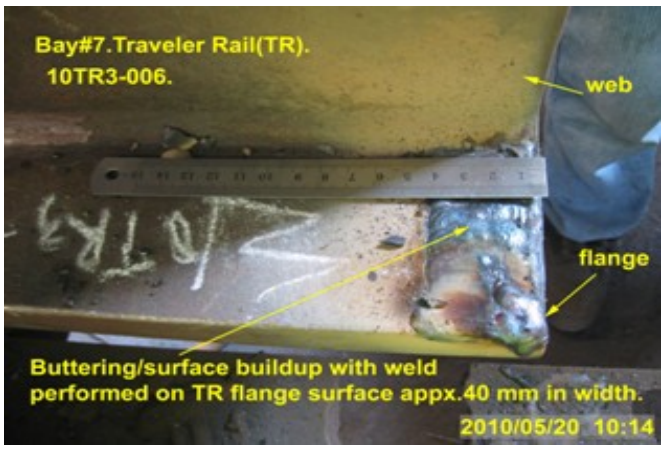
During the Quality Assurance (QA) random in-process visual inspection of Orthotropic Box Girder (OBG) Traveler Rails, this QA inspector observed that ZPMC welding personnel were buttering (build up with weld) base metal surfaces to compensate for material tolerance issues. An approved repair WPS for this repair was not available for QA Inspector review. The affected Traveler Rails are identified as: 10TR3-006 and 10TR2-004. The repair area is located on the Traveler Rail flanges. Welding process used was SMAW. The material is A709 Grade 345. This QA informed to ZPMC Quality Control (QC) identified as Mr. Wang Li Yang and American Bridge/Fluor (AB/F) QA Inspector identified as Mr. Chang of the above issue. This QA Inspector generated an incident report on this date, for further information see the incident report and Refer attached photos.

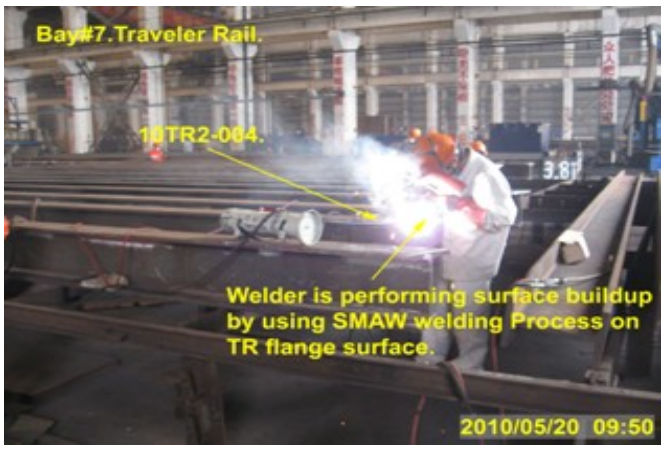
Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.











Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

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:	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer