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-015737
Date Inspected: 18-Jul-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: 1700
Location: Shanghai, China

CWI Name: Gao Zhi Chun

Inspected CWI report:	☐ Yes	☑ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A

CWI Present:	☑ Yes	☐ No	
Rod Oven in Use:	☑ Yes	☐ No	☐ N/A
Weld Procedures Followed:	☑ Yes	☐ No	☐ N/A
Verified Joint Fit-up:	☑ Yes	☐ No	☐ N/A
Approved WPS:	☑ Yes	☐ No	☐ N/A
Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: Tower & OBG Components

Summary of Items Observed:

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

BAY#10

This QA Inspector observed the following work in progress
Shielded Metal Arc Welding (SMAW):
Weld joint # 26 located on North tower Lift-5 Grillage Assembly NSD1 – TL5 – 3B/F. Welder is identified as 052930. ZPMC Quality Control (QC) Inspector is identified as Yu Zhi Lai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3313 – TC – P5.

ORTHOTROPIC BOX GIRDER (OBG) LIFT-13 AT BAY#10
This QA Inspector observed the following work in progress
Fluxcored Arc Welding (FCAW):
Weld joint # 10 located on Side Plate SP3078 – 001. Welder is identified as 053870. ZPMC Quality Control (QC) Inspector is identified as Yuan Hui Gang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

Weld joint # 03located on Side Plate SP3078 – 001. Welder is identified as 050275. ZPMC Quality Control (QC)

Inspector is identified as Yuan Hui Gang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

This QA Inspector observed the following work not in compliance:
Description of Incident:
During the random in-process visual inspection on Side Plate of Lift 13, this Quality Assurance Inspector (QA) discovered the following issue:
-Observed the single pass fillet welds that exceeded the maximum allowable single pass weld size qualified and noted on WPS # WPS-B-T-2133.
-The affected member and weld designations are:
-Side Plate SP3078-001, Welds#70; 74; 76; 80; 82 & 86 at fabrication Bay#10.
-The weld sizes have been measured and range between 12mm and 14mm.
-Maximum weld size observed on SP3078-001#74 is measured to be approximately 14mm.
-Minimum weld size observed on SP3078-001#86 is measured to be approximately 12mm.
-This does not comply with applicable approved WPS # WPS – B – T – 2133, where the maximum fillet weld size for single pass should be 9mm.

Applicable reference:
Approved WPS # WPS – B – T – 2133.
This QA notified ZPMC QC identified as Mr.Yuan Hui Gang and ABF inspector identified as Mr. Yang Yi Heng of the above issue and that an incident report will be generated.
For further information see below pictures:-

BAY#11

This QA Inspector observed the following work in progress
Shielded Metal Arc Welding (SMAW):
Weld joint # 4B located on Lift-5 Splice Plate Stiffener WSD1 – SPSA5 – 12. Welder is identified as 046704. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

Weld joint # 4B located on Lift-5 Splice Plate Stiffener ESD1 – SPSA5 – 12. Welder is identified as 040614. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

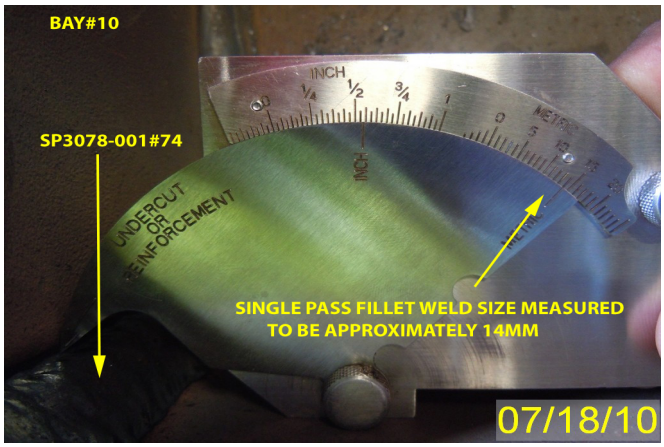
Weld joint # 1B located on Lift-5 Splice Plate Stiffener WSD1 – SPSA5 – 20. Welder is identified as 040667. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

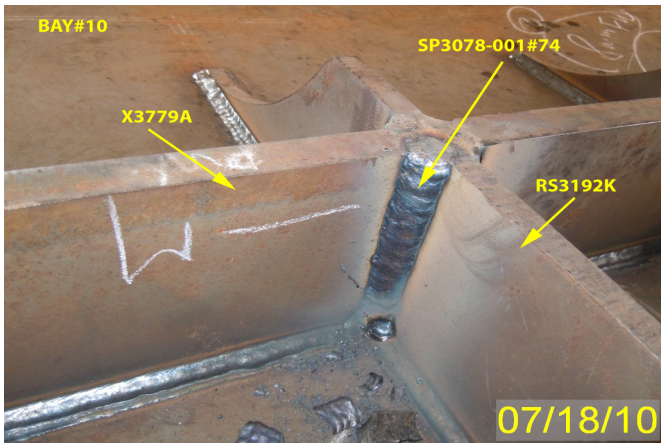
Weld joint # 1B located on Lift-5 Splice Plate Stiffener WSD1 – SPSA5 – 7. Welder is identified as 040656. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

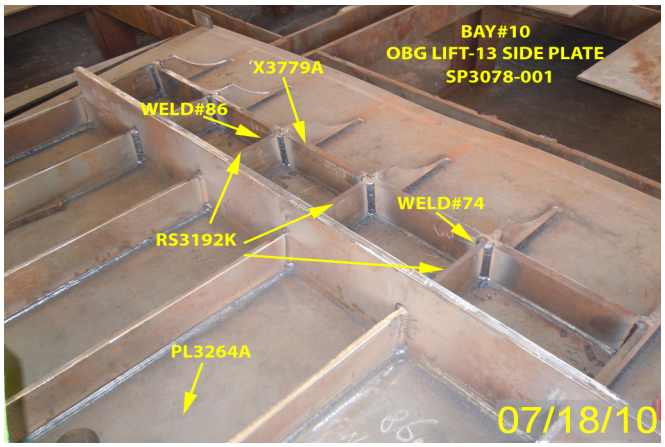
ORTHOTROPIC BOX GIRDER (OBG) LIFT-13 AT BAY#11
This QA Inspector observed the following work in progress
Fluxcored Arc Welding (FCAW):
Weld joint # 009 located on Bike Path panel Assembly BK004A1– 001. Welder is identified as 047304. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2221 – B – L2c – S – 2.

Weld joint # 009 located on Bike Path panel Assembly BK004A1– 003. Welder is identified as 205649. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – B – U2 – F.

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 Michael Ng - 15921845703, who represents the Office of Structural Materials for your project.

WELDING INSPECTION REPORT

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Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer