

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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017178**Date Inspected:** 19-Sep-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) Chanxing Island**Location:** Shanghai, China

CWI Name:	Mr. Geng Wei		
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:** OBG Bike Path and Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Magnetic Particle Testing (MT) – NWIT Document No's: 006712

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Bike Path. The weld designations reviewed are as follows:

1. BK004B8-009-019, 020, 021, 022, 029, 030, 041, 042
2. BK004B7-009-222, 223, 224, 225, 226, 227, 228, 229
3. BK004B5-009-022, 023, 060, 061, 080, 081
4. BK004B6-009-013, 014, 015, 016, 019, 020, 021, 022, 115, 116, 041, 042
5. BK004B8-007-055, 056, 059, 060, 108, 109, 107, 106
6. BK004B7-007-091, 092, 097, 098, 103, 104, 109, 110
7. BK004B7-007-123, 124, 231, 232, 230, 217, 218, 219, 220
8. BK004B4-007-014, 015, 040, 041
9. BK004B5-007-018, 019, 020, 021, 076, 077, 022, 023
10. BK004B6-007-055, 056, 059, 060, 053, 054, 104, 105
11. BK004B7-004-222, 223, 224, 225, 226

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Description of Incident: During the Quality Assurance (QA) random visual inspection of Orthotropic Box Girder (OBG) Bottom Plate 13AE, this QA Inspector discovered that ZPMC has welded temporary lifting lugs to OBG 13AE bottom plates without prior approval the engineer. The members are identified as BP3031 (60mm Thk.) and BP3033 (60mm Thk.) and portions of these plates are classified as (SPCM) Seismic Performance Critical Materials. The SPCM bottom plate numbers are identified as PL3221B and PL3221D and Non SPCM bottom plate numbers are identified as PL3220B, PL3218B, PL3217B, PL3220D, PL3218D and PL3217D. There were total 8 lifting lugs welded to the OBG 13AE bottom plates. These locations were not shown on the shop drawings. The location of OBG 13AE bottom plates are in Fabrication Bay 14. See the attached pictures.

Bay 14

This QA inspector observed ZPMC qualified welding personnel identified as 067876 perform Flux Core Arc Welding (FCAW) Welding on the Vortex Plate of OBG Segment 13BE, weld joint identified as VP3004-001- 002 and 005. ZPMC QC is identified as Mr. Guo Xing Hui. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-Tc-U4b-F.

This QA inspector observed ZPMC qualified welding personnel identified as 066439 perform FCAW Welding on the Vortex Plate of OBG Segment 13BE, weld joint identified as VP3004-001- 010 and 026. ZPMC QC is identified as Mr. Guo Xing Hui. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-Tc-U4b-F.

This QA inspector observed ZPMC qualified welding personnel identified as 045270 perform Submerged Arc Welding (SAW) Welding on OBG Segment 13AW, weld joint identified as SEG3013AD-001. ZPMC QC is identified as Mr. Xia Chun Hui. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-B-L2c-S-2.

OBG Segment 12BW

This QA inspector observed ZPMC qualified welding personnel identified as 044795 perform Shielded Metal Arc Welding (SMAW) Welding on the floor beam of OBG Segment 12BW, weld joint identified as FB3082-003-002 and 003. ZPMC QC is identified as Mr. Wang Wei Ming. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2114-FCM-1.

This QA inspector observed ZPMC qualified welding personnel identified as 044795 perform SMAW Welding on the floor beam of OBG Segment 12BW, weld joint identified as FB3082-003-004 and 005. ZPMC QC is identified as Mr. Wang Wei Ming. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2113-FCM-1.

Bay 19

This QA inspector observed ZPMC qualified welding personnel identified as 062749 perform FCAW on Suspender bracket, weld joint identified as SB020-90-061, 049 and 037. ZPMC QC is identified as Mr. Li Ming Yang. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS -B-T-2232-Tc-U5-F.

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This QA inspector observed ZPMC qualified welding personnel identified as 208633 perform FCAW on Bike Path, weld joint identified as BK004A8-010-098. ZPMC QC is identified as Mr. Li Ming Yang. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS -B-T-2334-Tc-P4-F.

This QA inspector observed ZPMC qualified welding personnel identified as 208632 perform FCAW on Bike Path, weld joint identified as BK004A8-011-078 and 098. ZPMC QC is identified as Mr. Li Ming Yang. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS -B-T-2334-Tc-P4-F.

This QA inspector observed ZPMC qualified welding personnel identified as 062807 perform FCAW on Bike Path, weld joint identified as BK004A3-013-051 and 052. ZPMC QC is identified as Mr. Li Ming Yang. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and 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 , who represents the Office of Structural Materials for your project.

Inspected By: Kumar,Vibin

Quality Assurance Inspector

Reviewed By: McClendon,Timothy

QA Reviewer