

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-020875**Date Inspected:** 19-Feb-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**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 & Tower**Summary of Items Observed:**

Summary of Items Observed: On this date Caltrans OSM Quality Assurance (QA) Inspector, Mike Hasler was present during the times noted above for observations and testing relative to the work being performed.

Bay 1

During a random observation this QA inspector observed the following components for the Orthotropic Bridge Girder (OBG);

GQ2-F209; 16qty bracket assemblies

10TR1 & 10TR2; 30qty traveler rails

E2-SB12; 3qty steel barrier assemblies

Raw Materials (pipe, sq. tubing & sq. bar stock) for Bike Path Hand Rail Assemblies

This QA observed that ZPMC was not performing any work on the above mention components during the time, this QA inspector was present.

Bay 3

During a random observation this QA inspector observed the following components for the Orthotropic Bridge Girder (OBG);

Architectural Housing; AH3150, AH3151, AH3152

This QA observed that ZPMC was not performing any work on the above mention components during the time,

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this QA inspector was present.

Bay 4

During a random observation this QA inspector observed the following components for the Orthotropic Bridge Girder (OBG);

11TR3, 11TR1, 10TR1, 11TR2; 30+qty traveler rails

This QA observed that ZPMC was not performing any work on the above mention components during the time, this QA inspector was present.

Bay 6

During a random observation this QA inspector observed the following components for the Orthotropic Bridge Girder (OBG);

CB18, CB19, Floor Beam; 80+qty drilled splice plates
Galvanized Handrails; 80+qty

This QA observed that ZPMC was not performing any work on the above mention components during the time, this QA inspector was present.

Bay 7

During a random observation this QA inspector observed the following components for the Orthotropic Bridge Girder (OBG);

Galvanized Handrails; 80+qty

This QA observed that ZPMC was not performing any work on the above mention components during the time, this QA inspector was present.

Bay 8

During a random observation this QA inspector observed the following components for the Orthotropic Bridge Girder (OBG);

BK4A-060; 1qty bike path assembly
BK4A-059; 1qty bike path assembly
BK4A-063; 1qty bike path assembly
BK4A-062; 1qty bike path assembly

This QA observed that ZPMC was not performing any work on the above mention components during the time, this QA inspector was present.

Bay 10

This QA inspector performed a random observation for the OBG. During the observation performed it was noted

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that at Bay 10 ZPMC was in process of SMAW welding bike path assembly components. ZPMC Certified Welding Inspector (CWI) Guo Yan Fei was present at this time of this observation and informed this QA inspector of the work that is in process. It was stated that ZPMC had 4 welders and identified the welders by ZPMC welder identification number appointed to them by ZPMC. This QA inspector verified this information for the following location;

Bike Path Subassembly
Weld: BK15A-001-011, 012
WPS-B-P-2212-TC-U4c
Welder-044011, 040581
2G/CJP/SMAW

The following digital picture illustrates the welding of the Bike Path Subassembly.

QA inspector observed the following components for the Orthotropic Bridge Girder (OBG);

Lift 6 North & South Tower Head Assembly

This QA observed that ZPMC was not performing any work on the above mention components during the time, this QA inspector was present.

Bay 11

During a random observation this QA inspector observed the following components for the Orthotropic Bridge Girder (OBG);

BK4A-055; 1qty bike path assembly
BK4A-064; 1qty bike path assembly
BK4A-057; 1qty bike path assembly
BK5A-003; 1qty bike path assembly
BK4C-024; 1qty bike path assembly

Lift 6 East & West Tower Head Cover Assembly

This QA observed that ZPMC was not performing any work on the above mention components during the time, this QA inspector was present.

Bay 12

During a random observation this QA inspector observed the following components for the Orthotropic Bridge Girder (OBG);

Segment 14W; 80+qty splice plates

This QA observed that ZPMC was not performing any work on the above mention components during the time, this QA inspector was present.

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Trial Assembly East Line

This QA inspector performed a random observation for the OBG. During the observation performed it was noted that ZPMC was in process of welding on segment assemblies. ZPMC Quality Control inspector Wang Li Yang was present at this time of this observation and informed this QA inspector of the work in progress and identified Zhu Zhong Hai as the CWI. It was stated that ZPMC had 4 welders and identified the welders by ZPMC welder identification number appointed to then by ZPMC. This QA inspector verified this information for the following location;

12BE+12CE (WR20190)

Weld: OBE12C-001

WPS-345-SMAW-4G(4F)-FCM-Repair-1

Welder-052493

4G/CJP/SMAW

12BE+12CE (WR20192)

Weld: OBE12A-002

WPS-345-SMAW-4G(4F)-FCM-Repair-1

Welder-040320

4G/CJP/SMAW

WR20185

Weld: OBE12E-003

WPS-345-FCAW-3G(3F)-ESAB-Repair

Welder-052763

3G/CJP/FCAW

WR20185

Weld: CA6502-011

WPS-345-FCAW-3G(3F)-ESAB-Repair

Welder-040367

3G/CJP/SMAW

Trial Assembly West Line

This QA inspector performed random observation for the OBG. During the observation performed it was noted that ZPMC was in process of welding on segment assemblies. ZPMC Quality Control inspector Zhou Ping was present at this time of this observation and informed this QA inspector of the work in progress and identified Zhu Zhong Hai as the CWI. It was stated that ZPMC had 4 welders and identified the welders by ZPMC welder identification number appointed to then by ZPMC. This QA inspector verified this information for the following location;

WR20203

Weld: OBW12E-002

WPS-345-SMAW-3G(3F)-FCM-Repair

Welder-046709

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3G/CJP/SMAW

During random observation this QA inspector observed the following components for the Orthotropic Bridge Girder (OBG);

CB19 Crossbeam assembly

CB18 Crossbeam assembly

This QA observed that ZPMC was not performing any work on the above mention components during the time, this QA inspector was present.

Bay 14 (west line)

UT Inspection

This Caltrans QA inspector received ZPMC non-destructive test (NDT) Inspection Notification, Doc. #08345 from ZPMC for segment 14W. This QA inspector performed ultrasonic test (UT) verification for Item 2, after ZPMC had performed their UT inspection of the following locations.

Item 2

SEG3020Z-077 & 079

At the time of the verification it was noted that the above component appeared to be within compliance of the contract documents. See Caltrans Ultrasonic Test Report (TL6027), dated 02-19-2011 for additional information.

The following digital picture illustrates weld SEG3020Z-077.

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



Summary of Conversations:

“As noted within the contents of this report.”

Comments

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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 James Devey 1500026784, who represents the Office of Structural Materials for your project.

Inspected By:	Hasler, Mike	Quality Assurance Inspector
Reviewed By:	Riley, Ken	QA Reviewer
