

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015446**Date Inspected:** 10-Jun-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:	N/A	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:

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

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD

Segment # 7BE

This QA Inspector along with Caltrans QA Mr. Surendra Prabhu performed Individual Inspection for the Flatness measurement for Side Panel to Corner Assembly Longitudinal Weld (Cross Beam Side) from PP 53 to PP 55 Measurement area. Those locations after rectification ZPMC offer, Re-inspection after the Heat Straightening found satisfaction all these details noted and forwarded to team leader for further action.

Panel Point from PP 53 towards PP 54

1190mm to 4200mm two point of contact measurement deformation 2~ 3mm max.

Panel Point from PP 54 towards PP 55

440mm to 810mm two point of contact measurement deformation 1~ 3mm max.

1750mm to 2860mm two point of contact measurement deformation 2 ~ 3mm max.

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

3740mm to 4400mm two point of contact measurement deformation 2 ~ 4.5mm max.

Segment # 7EE

This QA Inspector performed Dimension Inspection along with Caltrans QA Inspector Mr.Manjunath Math Joint Survey Inspection for the following.

Flatness measurement for Side Panel to Corner Assembly Longitudinal Weld (Bike Path Side) from PP 59 to PP 61 Measurement area. Those locations after rectification ZPMC offer, Re-inspection after the Heat Straightening found satisfaction all these details noted and forwarded to team leader for further action.

Panel Point from 59 towards 60

2090mm to 4170mm two point of contact measurement deformation 1.5 ~ 3.5mm max.

Panel Point from 60 towards 61

1760mm to 3920mm two point of contact measurement deformation 3 ~ 5mm max.

Segment # 7DE

This QA Inspector performed Dimension Inspection along with Caltrans QA Inspector Mr.Manjunath Math Joint Survey Inspection for the following.

Flatness measurement for Side Panel to Corner Assembly Longitudinal Weld (Bike Path Side) from PP 56 to PP 58 Measurement area. Those locations after rectification ZPMC offer, Re-inspection after the Heat Straightening found satisfaction all these details noted and forwarded to team leader for further action.

Panel Point from 56 towards 57

2300mm to 2610mm two point of contact measurement deformation 3 ~ 5mm max.

3020mm to 3230mm two point of contact measurement deformation 3 ~ 5mm max.

Panel Point from 57 towards 58

2560mm to 2950mm two point of contact measurement deformation 3 ~ 5mm max.

Segment # 7AE

This QA Inspector performed Dimension Inspection along with Caltrans QA Inspector Mr.Manjunath Math Joint Survey Inspection for the following.

Flatness measurement for Side Panel to Corner Assembly Longitudinal Weld (Cross Beam Side) from PP 48 to PP 49 Measurement area. Those locations after rectification ZPMC offer, Re-inspection after the Heat Straightening found satisfaction all these details noted and forwarded to team leader for further action.

From free end towards Panel Point 48

1600mm to 3850mm two point of contact measurement deformation 2.8 ~ 4mm max.

Panel Point from 48 towards 49

1420mm to 4200mm two point of contact measurement deformation 2.8 ~ 4mm max.

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

Segment # 7EE

This QA Inspector performed Dimension Inspection along with Caltrans QA Inspector Mr.Manjunath Math Joint Survey Inspection for the following.

Flatness measurement for Side Panel to Corner Assembly Longitudinal Weld (Cross Beam Side) from PP 60 to PP 61 Measurement area. Those locations after rectification ZPMC offer, Re-inspection after the Heat Straightening found satisfaction all these details noted and forwarded to team leader for further action.

From Panel Point 60 towards 61

2380mm to 3160mm two point of contact measurement deformation 2.8 ~ 4mm max.

Panel Point from 48 towards 49

1420mm to 4200mm two point of contact measurement deformation 2.8 ~ 4mm max.

Segment 8AE to 8BE (T-Ribs) Caltrans QA Survey Inspection

This QA Inspector along with Caltrans QA Mr.Surendra Prabhu performed Individual Inspection for the T-Ribs to T-Ribs between Segment 8AE to 8BE (Shop Segment Splice) between Panel Point (PP) 64 and PP 65 North(Cross Beam Side total 19 Nos. T-Ribs) and South (Bike Path Beam side Total 19 Nos. T-Ribs) for Vertical Offset. The measured readings were recorded on spread sheet, generated the report and submitted to the Task Leader and Engineer for review.

Segment 8AE ~ 8BE (T-Ribs)

This Quality Assurance (QA) Inspector witnessed final tension verification for Side Panel & Bottom Panel T-Ribs Cross Beam side and Bike Path Side between Panel Point (PP) 64 to PP 65 for Segment 8AE ~ 8BE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00372 Dated June 10, 2010.

Bolt sizes used were M22 x 70 RC Set# DHGM2200090 and final torque required was 447 N-m.

Bolt sizes used were M22 x 65 RC Set# DHGM220105 and final torque required was 380 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-590.

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 QC concerning this project.

Comments

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

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 phone: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhune,Manoj	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer
