

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-000602**Date Inspected:** 01-May-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 0**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 12**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Dao, Shanghai

Quality Control Contact:	ABF Paint Supervisor William (Bill) Quality Control Present:	Yes	No				
Material transfer:	Yes	No	N/A	Sampled Items:	Yes	No	N/A
Stock Transfer:	Yes	No	N/A	OK to Cut:	Yes	No	N/A
Rebar Test Witness:	Yes	No	N/A	Delayed/Cancelled:	Yes	No	N/A
Other:	Surface Preparation and Coatings Application						
Bridge No:	34-0006			Component:	OBG 1BW, 5BW, 2AE, Misc. Metal		
Bid Item:	79, 80, 81			Lot No:	B226		

Summary of Items Observed:

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. Donald Jordan arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

The following inspections were performed by Caltrans QA Coatings Inspector Jordan, American Bridge/Fluor Enterprises, a JV (ABF) Paint Supervisor Don Walton, ABF QC Zhou Qun Song (Joe), ABF QC David Duon, ABF QC Shi Zhaoyuan (Stone), ABF QC Zhou Wei, International Paint (IP) Onsite Technical Services Engineer (OTSE) Peng Zi Li, IP OTSE Alpha Chen, Zhenhua Port Machinery Company, LTD (ZPMC) QC Manager Xia Yong, ZPMC QC Zhang Diang, ZPMC QC Dong Yao Fei and ZPMC QC Guo Wan Li.

OBG 2AE

Caltrans QA Coatings Inspectors received a Notice of Inspection for to attend a joint inspection with ABF and ZPMC QC on the internal and external surfaces of OBG 2AE for edged conditioning before abrasive blasting. A few spots were pointed out that the grinders missed. It was suggested to Mr. Dong that they go ahead and grind all the other surface defects they can locate prior to abrasive blasting. This will save them time from grinding in the blast shop and maybe reduce the amount of time required for grinding after blasting. He directed the grinders to continue grinding the defects.

OBG 1BW

Caltrans QA Coatings Inspectors received a Notice of Inspection for to attend a joint inspection with ABF and ZPMC QC for primer cure testing and verifying dry film thickness readings on OBG 1BW. Caltrans QA Coatings Inspector Jordan observed ZPMC and ABF QC personnel performing dry film thickness readings according to

SOURCE INSPECTION REPORT

(Continued Page 2 of 3)

SSPC PA 2 guidelines. The readings were recorded by ZPMC QC personnel.

Cure tests were performed according to the requirements in the Contract Special Provisions, the Approved As Noted Paint Quality Work Plan and the appropriate standards referenced in those documents. The Pencil Hardness test was acceptable. The Quarter Rub test was acceptable. The Solvent Rub (MEK Rub) test passed.

Adhesion Tests were performed. The dollies were pulled under the supervision of the above listed QA and QC personnel. The pull tests were acceptable. The results exceeded the contract requirement of 4Mpa minimum.

Dry Film Thickness readings (DFT's) were taken according to SSPC PA-2. The dft's were recorded by ZPMC QC personnel. Taking of the readings were not witnessed by Caltrans QA Coatings Inspectors and ABF QC personnel.

Spot checks will be taken by Caltrans QA Coatings Inspectors at a later time. ABF has not given the final approval of the coating application.

Residual Chlorides (soluble salts) tests were performed on the exterior surfaces of OBG 1BW. The test results showed that the surface was acceptable to be coated with

The highest registered reading of salts contamination was 20 micro Siemens per square centimeter which is below the contract maximum of 10 micrograms per square centimeter.

OBG 5BW

Caltrans QA Coatings Inspectors received a Notice of Inspection for to attend a joint inspection with ABF and ZPMC QC to locate visual surface anomalies and weld defects on the floor area of OBG 5BW. ABF verbally requested that the Caltrans welding staff be notified to perform VT inspection after blast. Areas requiring grinding were identified and marked by QC and QA staff.

The inspection was postponed due to inadequate lighting inside the OBG. Once the lighting issue was corrected QA/QC resumed the inspection. Caltrans QA Weld Inspector's performed VT inspection to locate and mark any weld repairs required. The weld repair spots were identified by placing tape over the area so it can be located after primer application. After the inspection was complete, grinding was performed. Abrasive blasting of the area was performed again. Another surface preparation inspection will be performed after blasting is complete. Lots of weld spatter required grinding, edges and cut surfaces required grinding around floor beam connections. NO ZPMC or ABF steel inspectors were on site looking at the welds.

Miscellaneous Metal:

Caltrans QA Coatings Inspectors received Notices of Inspection for to attend a joint inspection with ABF and ZPMC QC for abrasive blast surface preparation of 660 miscellaneous splice plates. Many of the plates required grinding to remove sharp edges and other surface anomalies in the substrate that left sharp edges sticking up. Edge conditioning required by the Project Special Provisions Section 10-1.69 was also performed. After the grinding was completed the surfaces were re-blasted to meet the SSPC SP10 Contract requirements. Surface profile Testex Tape was used by ZPMC QC personnel to record the blast profile. The Testex tape was measured using a dial micrometer. The readings were within the contract requirements of 40 and 86 microns. Ambient conditions were within Contract required parameters.

Temporary Tower

Caltrans QA Coatings Inspector's received a Notice of Inspection to attend a joint inspection with ABF and ZPMC QC for abrasive blast surface preparation and primer application of temporary tower pieces. Caltrans QA Coatings Inspector Jordan did not attend the inspection.

SOURCE INSPECTION REPORT

(Continued Page 3 of 3)

Fabrication on assembled components of the OBG's are not complete. Coating damage requiring re-blast is expected.



Summary of Conversations:

There were no relevant conversations on this date.

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 Mazen Wahbeh (China) +8613472477571, who represents the Office of Structural Materials for your project.

Inspected By:	Jordan,Don	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
