

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-002710**Date Inspected:** 15-Oct-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**Quality Control Contact:** Mr. Don Walton**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:** Coating Inspection**Bridge No:** 34-0006**Component:** See Below**Bid Item:** 77, 78, 79**Lot No:** B # 204**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE II coating inspector, Mr. Baskar Govindarajan 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 II coating inspector observed the following:

An inspection was requested on the OBG Segment, Lift 10 East, connection weld seam entire internal surface between 10BE & 10CE, vide inspection request no. 4596 at OBG assembly yard.. This QA inspector observed, ABF Inspectors Mr. Hong, and Mr. Vince inspecting these surfaces for surface profile as per SSPC SP 10. This QA inspector observed, surface profile measured by ZPMC QC inspectors found to be in the range of 72 to 84 microns which is acceptable as per contract Documents. Ambient conditions found measured by ZPMC QC Inspectors 4.3 deg. celcius above due point and the relative humidity found to be 66.6 % which is acceptable as per contract documents. This profile found accepted for Interzinc 22 application after minor touch ups. International protective coatings technical service representative Mr. Yang was found present during the coarse of this inspection process. (Photo of ambient conditions measured is attached)

An inspection was requested on the OBG connection weld seam External surface between 10AW, 10BW and Between 10BW, 10CW and Entire bottom plate except the Cross beam bottom plate of Lift 10 -L10W for MEK test, DFT Check and Salt test for the application of Mist and Finish coat , vide request no. 4597 at OBG assembly yard. This QA inspector observed, ABF inspector Mr. Stone, Mr. Wang and Mr. Vince performing the required inspections. The MEK test found to be carried out in 2 places and the result observed as Grade 5 . The Result of

---

## SOURCE INSPECTION REPORT

( Continued Page 2 of 3 )

---

Residual chloride test carried out in 2 places found to be 9.8 us/cm and 10us/cm respectively. The result of Salt test and MEK tests found to be acceptable as per contract documents. International protective coatings technical service representative Mr. Yang. was found present during the coarse of this inspection process. (Photo of MEK Test is attached)

An inspection was requested on the OBG Crash Barrier external surface -15 nos and Counter weight external surfaces -3 nos, (CW90, CW92, CW94) for Surface preparation inspection after Primer coat, MEK Test and Residual chlorides test, vide request no. 4599 at Paint shop 2. This QA inspector observed, ABF inspectors Mr. Sun, Mr. Stone and Mr. Helen performing the said inspection. The MEK test found to be carried out in 2 places each in Counterweight and Crash barrier and the result observed as Grade 5 in all places. The Result of Residual chloride test carried out in 1 place of Crash Barrier found to be 13.2 us/cm. The result of Salt test and MEK tests found to be acceptable as per contract documents. This QA inspector observed, ABF Inspector accepted Crash barrier external surfaces for Interfine 979 application and rejected counter weight stating the caulking in edges is to be applied uniformly. International protective coatings technical service representative Mr. Yang. was found present during the coarse of this inspection process.

An inspection was requested on the OBG Crash Barrier external surface -8 nos, Bike path splices- 4nos, shim plate -2 nos, OBG internal diaphragm LD3036 -1 no. and L- Splices- X37L- 12 nos for Surface preparation inspection for Interzinc 22 application, vide request no. 4598 at Blasting shop 2. This QA inspector observed, ABF inspectors Mr. Don Walton, Mr. Sun, Mr. Stone and Mr. Helen performing the said inspection and marked areas for less profile, welding repairs like porosity and grinding. The result of Surface profile test conducted at 3 places found to be in the range of 75 to 82 microns. Salt test conducted at 1 place found to be 10.7 US/CM. The result of Salt test and Profile test found to be acceptable as per contract documents. This QA Inspector found, ABF Inspectors accepted all the surfaces for Interzinc 22 application after minor touch ups. International protective coatings technical service representative Mr. Yang. was found present during the coarse of this inspection process.

An inspection was requested on the Tower Cross Bracing external surface -3 nos (WD1-CBSA3-1-89mtr., WD1-CBSA3-1-99mtr and WD1-CBSA3-1-109mtr) and Façade cover plate external surface of 109 mtr. East and North (ED1-SFSA3-16, ED1-SFSA3-36) for Surface preparation inspection after Mist coat, MEK Test and Residual chlorides test, vide request no. T 1229 at Paint shop 2. This QA inspector observed, ABF inspectors Mr. Sun, Mr. Stone, Mr. Wei and Mrs. Helen performing the said inspection. The MEK test found to be carried out in 2 places and the result observed as Grade 5 in all places. The Result of Residual chloride test carried out in 1 place found to be 18.3 us/cm. The result of Salt test and MEK tests found to be acceptable as per contract documents. This QA inspector observed, ABF Inspector accepted these external surfaces for Finish coat application. International protective coatings technical service representative Mr. Yang. was found present during the coarse of this inspection process.

An inspection was requested on the OBG Misc splices -564 pieces, Crash barrier- 9nos and Misc. shim plates -252 pieces for Washing and Degreasing, vide inspection request no. 4602 at West Gate of Blasting workshop. This QA inspector observed, ABF inspector Mr. Stone and Mr. Don Walton inspecting all the surfaces. This was found accepted by ABF Inspector after minor removal of oil in few hole areas. International protective coatings technical service representative Mr. Yang was found present during the coarse of this inspection process.

---

---

# SOURCE INSPECTION REPORT

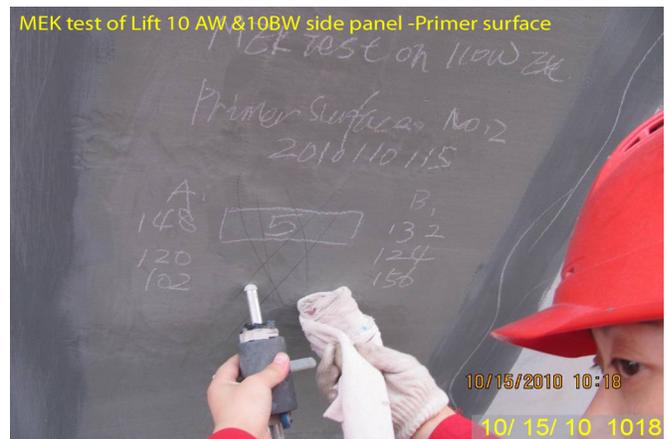
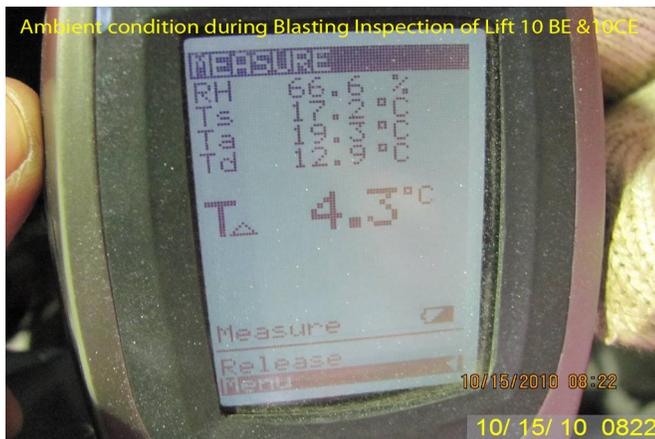
( Continued Page 3 of 3 )

---

---

An inspection was requested on the OBG Segment 11DE external surface for Surface preparation inspection after Primer coat, MEK Test and Residual chlorides test, vide request no. 4599 at Paint shop 2. This QA inspector observed, ABF inspectors Mr. Sun, Mr. Wei and Mrs. Helen performing the said inspection. The MEK test found to be carried out in 6 places and the result observed as Grade 5 in all places. The Result of Residual chloride test carried out in 2 places found to be 15.6 and 16 us/cm. The result of Salt test and MEK tests found to be acceptable as per contract documents. This QA inspector observed, ABF Inspector accepted these external surfaces for Interfine 979 application. The DFT found to be in the Range of 102 to 175 microns which is acceptable as per contract Documents. International protective coatings technical service representative Mr. Yang. was found present during the course of this inspection process.

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



## Summary of Conversations:

No Relevent Conversation

## 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 Michel Ng (15921845703), who represents the Office of Structural Materials for your project.

---

**Inspected By:** Baskar, Govindarajan

Quality Assurance Inspector

---

**Reviewed By:** Clifford, William

QA Reviewer