

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 #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-002655**Date Inspected:** 17-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), 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:

1. An inspection was requested on the OBG internal entire floor from the pre weld seam to P.P 78 of Lift 9 West, 7 sections, vide inspecton request no. 4355 for DFT check and final acceptance inspection prior to transport from ZPMC at Ship no. 18, Heavy Dock. This QA inspector observed, ABF inspector Mr. Don Walton and Mr. Wei, Mr. Turtle and Mr. Helen inspecting all the surfaces. This QA inspector accepted 2 sections, i.e. P.P 77 to P.P 78 and P.P 76 to 77 after removing Dust, paint touch ups and stain marks in floor. This QA inspector rejected other sections for Grit contamination, Holidays and touch ups with Interzinc 52. The other sections - from pre weld seam to P.P 76, P.P 78 to P.P 85 and Cross beam terminal internal surface, 9BW, 9DW, offered for inspection, vide notification no. 4362. This QA inspector found ABF inspectors Mr. Sun, Mr. Wei and Mr. Turtle were doing inspection of these surfaces. It was found that, ZPMC personnels have been asked by ABF inspectors to remove dust, contaminations and stains in all the surfaces wherever found. After cleaning these contaminants, these surfaces have been accepted. DFT measured as per Paint application 2 and found within acceptable range. International protective coatings technical service representative Mr. Li Peng was found present during the course of this inspection process. (Photo of internal surfaces is attached)

2. An inspection was requested on the OBG internal entire floor from P.P 82 to P.P 85 of Lift 9 West, 3 sections, vide inspecton request no. 4356 AND Cross beam terminal internal surface, 9DE, vide notification no. 4363 for

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DFT check and final acceptance inspection prior to transport from ZPMC at Ship no. 18, Heavy Dock. This QA inspector observed, ABF inspectors Mr. Sun, Mr. Wei and Mr. Turtle were doing inspection of these surfaces. It was found that, ZPMC personnels have been asked by ABF inspectors to remove dust, contaminations and stains in all the surfaces wherever found. After cleaning these contaminants, these surfaces have been accepted. DFT measured as per Paint application 2 and found within acceptable range. International protective coatings technical service representative Mr. Li Peng was found present during the coarse of this inspection process.

3. An inspection was requested on the OBG segment 11BE, internal floor from P.P 99 to P.P 100 to the pre weld seam (2 sections) for Surface preparation inspection, vide request no. 4361 at Blast shop 1. This QA inspector observed, ABF inspector Mr. Stone performing the said inspection. This Caltrans inspector observed, Mr. Vibin (B 294), Mr. Tim McClendon (B 290), and Mr. Larry Viars (B 252) from CT were present during the inspection for Pre blast visual inspection and they marked all the Grinding points, Grinding +MT and weld repair points. This QA inspector observed, ABF inspectors rejected all internal surfaces for Overblast, Grinding and further weld repairs. This was again offered for inspection vide notification no. 4365. Salt test have been performed by ZPMC QC inspectors and the result found to be 31.7 US/CM which is acceptable as per contract documents. Surface profile have been found measured by ZPMC QC Inspectors at 6 places and the result found to be in the range of 76 to 84 microns which is acceptable as per contract documents. Due to the profile is not upto the requirement as per SSPC SP 10 at few places, this was found rejected again by ABF inspectors. This QA inspector found these surfaces offered for inspection again, vide inspection request no. 4366. This QA inspector found ABF inspector Mr. Stone inspecting marked surfaces and accepted for Interzinc 22 application. International protective coatings technical service representative Mr. Li Peng. was found present during the coarse of this inspection process.

4. An inspection was requested on the Suspender Bracket -14 nos, Counter weight cover plate -14 nos and CB 11 ACCESSORIES, M201A -9 nos for DFT Check and final acceptance inspection prior to transport from the workshop, at Paint shop 2, vide inspection request no. 4354. This QA inspector observed, ABF inspector Mr. Helen and Mr. Turtle inspected these items. Mr. Aaron Prichlik from Caltrans have been informed for final acceptance of Suspender Brackets and Counter weight cover plates. It was found, Mr. Aaron prichlik accepted 5 nos of Suspender Brackets and the no. is as follows, SB72E, SB76E, SB80W, SB80E, and SB 74E. Other 9 nos, have been found rejected by Mr. Aaron prichlik for High DFT, Grit contamination, Sagging and Wrinkles. These counter weights have been found offered for inspection again after necessary rectifications in the evening. This QA inspector observed that, the marked points for Sagging, High DFT etc, have been found attended by ZPMC Personnels and the DFT found within the acceptable range. This was informed to Mr. Aaron Prichlik by phone. International protective coatings technical service representative Mr. Li Peng was found present during the coarse of this inspection process. (Photo of DFT check in suspender Bracket is attached)

5. An inspection was requested on the OBG Suspender Bracket, SB 74E and SB80E for adhesion test, vide inspection request no. 4359 at Paint shop 2. This QA inspector observed, ABF inspector Mr. Turtle inspecting adhesion test in external surfaces in 2 places where the dolly have been attached. The result of adhesion test found to be 13.8 Mpa with 30% cohesion and 12.85Mpa with 50% cohesion which is acceptable as per contract documents. International protective coatings technical service representative Mr. Li Peng was found present during the coarse of this inspection process.

6. An inspection was requested on the Tower external man hole adjacent areas, TL2E, S, W, N -4 areas for DFT check, Residual chlorides test and MEK test vide notification no. T 1201, at Ship no. 18- Heavy Dock. This QA

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inspector observed residual chloride test and MEK test have not been conducted by ZPMC personnels before mist coat. Ambient conditions have been monitored and found to be 9.3 deg. above dew point and Relative humidity found to be 57.3% which is acceptable as per contract documents for painting. The surface temperature found to be 30 deg. celcius. After finishing the Interfine 979, Finish coat, This QA inspector measured the DFT and found to be in the range of 87 to 180 which is not acceptable as per contract documents. ABF inspector Mr. Don Walton have been informed for the same in the evening. Mr. Aaron prichlik also have been informed about this by telephone. International protective coatings technical service representative Mr. Li Peng was found present during the coarse of this inspection process. (Photo attached)

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

Lift 9-West -Inside final acceptance inspection



Tower Manhole adjacent area -Finish coat inspection- Ship no.18



Suspender Bracket- Finish coat, DFT inspection at Paint shop 2



Summary of Conversations:

Crush Barriers -5 nos, Cover plate-14 nos for Mist coat and Finish coat inspections and Tower Manhole adjacent areas for DFT inspection during night hrs was informed to Caltrans which was communicated to Mr. Mark miller by Phone. He inturn asked me to inform to Night shift inspectors and Mr. James Lumley. This was informed by mail to all concerned.

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

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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
