

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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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-000659**Date Inspected:** 06-Jun-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) Oak	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 1AA, 5CE, L3,L4,L5**Bid Item:** 77,78,79,80**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 Supervisors William (Bill) Oak and 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 Trial Assembly

Caltrans QA Coatings Inspectors received a Notice of Inspection to attend a joint inspection with ABF and ZPMC QC for surface preparation by abrasive blasting. The inspection consisted of looking at the blasted surfaces of external weld seams of OBG's 3BW, 4AW and 4BW, 5AW. After looking at the abrasive blasted surfaces it was determined by ABF that the base metal did not meet the SSPC SP10 Near White Metal Contract requirements. ZPMC was informed that further abrasive blasting was required.

Miscellaneous Metal

Caltrans QA Coatings Inspectors received a Notice of Inspection to attend a joint inspection with ABF and ZPMC QC for cure testing of the primed surfaces prior to finish coat application. Cure tests were performed according to the requirements in the Contract Special Provisions, the Approved As Noted Paint Quality Work Plan and the

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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. No adhesion testing was performed today. The Contractors adhesion tester was sent to the manufacturer for calibration testing. Adhesion testing will be performed after the gauge is returned to the jobsite.

OBG 5CE

Caltrans QA Coatings Inspectors received a Notice of Inspection to attend a joint inspection with ABF and ZPMC QC for surface preparation by abrasive blasting. The inspection consisted of looking at the abrasive blasted surfaces of OBG 5CE where the staging supports were in place during abrasive blasting of the segment. After the inspection was completed the surfaces were determined to meet the SSPC SP10 Near White Metal Contract requirements. Residual Chlorides (soluble salts) tests were performed on the abrasive blasted surfaces. The Bresel Patch method was used to test for Residual Chlorides. The test results showed that the surface was acceptable to be coated with Interzinc 22. The highest registered reading of salts contamination was 20 microsiemens per square centimeter which is below the contract maximum of 10 micrograms per square centimeter (9.25 microsiemens per square centimeter). Ambient conditions were within Contract required parameters. 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 micrometer readings of the Testex Tape were within the contract requirements of 40 and 86 microns. Ambient conditions were within Contract required parameters. The surfaces to be coated were blown down again with compressed air to remove dust. After the dust was removed Interzinc 22 primer was applied within the specified 8 hour window after the start of abrasive blasting.

OBG 1AA

Caltrans QA Coatings Inspectors received a Notice of Inspection to attend a joint inspection with ABF and ZPMC QC for surface preparation by abrasive blasting. The inspection consisted of looking at the abrasive blasted surfaces of OBG 1AA replacement parts. After looking at the abrasive blasted surfaces it was determined by ABF that the base metal did not meet the SSPC SP10 Near White Metal Contract requirements. ZPMC was informed that further grinding and abrasive blasting was required.

Fabrication on assembled components of the OBG's and Towers are not complete. Outstanding weld repairs have not been performed. Coating damage requiring re-blast is expected.



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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
