

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-002403**Date Inspected:** 09-Mar-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:** Changxing Dao, Shanghai**Quality Control Contact:** 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:** Cross Beam #4, Cross Beam #5, Lift 5 West,**Bid Item:** 77, 78, 79**Lot No:** B265**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley 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:

Cross Beam #4

ZPMC requested a "Final" inspection of the applied Finish coating on the external surfaces coated with Interfine 979 top-coat. Caltrans Engineer Bill Howe was notified and attended subsequent inspection with Caltrans QA Lumley, visual appearance of applied top-coating exhibited runs and sags on side plate vertical surfaces and subsequently the appearance was non compliant with the contract documents. ZPMC to perform repairs and resubmit another Notification upon amendment of deficient non-compliant items.

Sub-Assemblies

Base metal surfaces of approximately 135 Splice Plates, 243 Pipe Support Brackets, 10 sets of Traveler Rail Brackets and 24 Upper Corner Unit assembly Plates were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 undercoat applied. Profile amplitude was 84,84,84µm on 3 different base metal components.

Cross Beam #5

Internal and external surfaces were observed to undergo minor touch up operations to undercoated surfaces as well as Interzinc 52 organic zinc undercoat application to the internal surfaces of the bolt holes. Cleaning operations were also being performed by ZPMC personnel concurrent with coatings application. A "Final" inspection was requested for visual and Dry Film Thickness (DFT) verification on the internal surfaces of the bottom plate and subsequent repairs were required.

Sub-Assemblies

SOURCE INSPECTION REPORT

(Continued Page 2 of 2)

Counterweights #44 & 46 external surfaces were top-coated with Finish coat Interfine 979. Previous Notification for application today was not accepted as repairs were still in process of application of touch up and repairs with Interzinc 52 organic zinc undercoat at 10:00 am.

Lift 6 West

Base metal surfaces of the weld seam as segments 6AW/BW and 6BW/CW internal locations were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 undercoat applied.

Lift 5 West

Internal areas were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 undercoat applied to amend repairs from Trial Assembly and welding operations of damages incurred. Areas repaired Side and Bottom Plate MT repair areas and Internal Top Side Plate on the west side. Profile amplitude was 72-84µm.

Cross Beam #4

Internal undercoated surfaces which exhibited soft and powdery undercoat were abrasive blasted to base metal and an SSPC SP-10 condition and re-application of Interzinc 22 undercoat performed. Also ZPMC requested another "Final" finish coating inspection of the external top-coated surfaces and once again the work was determined to be non-compliant with the contract documents by Caltrans Engineer Bill Howe as the top-coated surfaces exhibited sags and runs and contaminants and repaired areas were not amended.

Cross Beam #5

Bottom Plate support contact surfaces were abrasive blasted to base metal and an SSPC SP-10 condition and Interzinc 22 undercoating applied. Approximately 1 square meter of surface area was repaired and the profile amplitude was 68-76µm.

Note: All inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representative were available for inspections and consultation.

Summary of Conversations:

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 Eric Tsang (858) 699-9549, who represents the Office of Structural Materials for your project.

Inspected By:	Lumley,James	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer
