

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 #: 50.15**SOURCE INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-001324**Date Inspected:** 26-Oct-2009**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), Jiangyin**Location:** Changxing Dao, Shanghai**Quality Control Contact:** 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:** Coatings Inspection**Bridge No:** 34-0006**Component:** OBG 7AE, OBG 6CE, OBG 6AW, Sub-Assemblies**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:

OBG 7AE

Transported from Blast shop into paint shop for repairs and testing.

OBG 6CE

Base metal surfaces of the Side Plates and Bottom Plate internal "T" stiffeners from Panel Points 45, 46, 47 to end weld seam were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 applied. A total of 5 inspections were performed until SSPC SP-10 condition was achieved.

OBG 6AW

Transported to the Blast shop. NDT was not completed prior to transport to the blasting workshop. Fabrication work incompletes at this time.

Sub-Assemblies

ZPMC requested a "Final" inspection of repaired components which consisted of Bikeway Brackets BK002-001, BK003-001, Suspender Brackets, SB14E, SB16E, SB20E, SB22E, SB26E, Traveler Rail Bracket, TR8B-PP8.5 and 12 M201A Cross Beam accessories. Caltrans Engineer was in attendance for the inspection process and all items were found to be in general compliance with the contract documents.

Sub-Assemblies

A total of 90 pieces of Cable Brackets and Splice Plates base metal surfaces were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 applied. Profile amplitude was 60-70um. Numerous Fabrication defects were

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discovered on the Cable Support sub-assemblies and the entire lot was rejected by ABF and sent for repairs and amendment.

Lift 2 East & West

Repairs were performed to the internal surfaces of the affixed Lamp Post component. Previously coated surfaces were abrasive blasted to base metal and an SSPC SP-10 condition and Interzinc 52 applied to internal blasted areas.

Caltrans Engineer Bill Howe was contacted via telephone by Caltrans QA Lumley to discuss the use of Interzinc 52 in this area due to the extremely limited access and complexity of the surfaces to be coated, Interzinc 52 versus the Interzinc 22. Two coats of Interzinc 52 was applied to the internal areas.

OBG 6BW

Re-testing of adhesion was performed on the external surfaces undercoated with Interzinc 22 due to low values from previous testing. All testing observed not only exceeded the minimum value of 4.0Mpa but were significantly higher than previous tests. Undercoated surfaces were in general compliance with the contract documents.

Tower Sub-Assemblies

Tower Channel Iron: M3-130, M3-10, M3-55, M3-52, M3-58, M3-48, M3-8, M4-25. Two units each for a total of 16 pieces base metal surfaces were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 applied.

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) 699-7549, who represents the Office of Structural Materials for your project.

Inspected By:	Lumley,James	Quality Assurance Inspector
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Reviewed By:	Carreon,Albert	QA Reviewer
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