

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-002273**Date Inspected:** 26-Nov-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), Changxing Island**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:** Coating Inspection**Bridge No:** 34-0006**Component:** South Tower Lift #1, OBG 7DE, Lift 4 East, I**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 7DE

Base Metal surfaces of the upper internal "U" Rib Stiffeners, Upper Corner Units, Upper Chevron Connections and FL-2-1 Beams were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 undercoat was applied.

Three (3) inspections took place prior to application of undercoat.

Lift 4 East

Adhesion testing was performed on the external weld seam of the West Side Plate of the NDT damaged area of the Transverse Weld and the "F" Side Plate/Top plate weld. Testing was done over a minimally cleaned surface to ascertain adhesion of Interzinc 52 Organic Zinc Rich Primer which was applied to the surfaces in accordance with cleaning requirements listed: A, No cleaning, B, SSPC SP-1, C, SSPC SP-2/SSPC SP1 D, SSPC SP-2/1. The following values were observed for each of the aforementioned locations: A, 4.85 Mpa & 5.92 Mpa B, 5.20 Mpa & 5.10 Mpa C, 4.61 Mpa & 3.88 Mpa D, 8.75 Mpa & 8.81 Mpa. All tested areas exhibited 100% glue failure from the applied coating no coating was removed.

Lift 2 West

Internal previously undercoated Floor "T" Stiffener areas and Bottom Plate areas from Panel Points# 15-16 were abrasive blasted to remove "Rust Stain" and repair damaged areas from Trial Assembly operations and re-application of Interzinc 22 was applied to effect repairs. Small areas of edges were repaired with Interzinc 52 undercoat. Three (3) inspections were conducted prior to the application of undercoats.

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OBG 7CE

External Base Metal surfaces previously in contact with segment support posts were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 undercoat was applied.

South Tower Lift #1

Internal surfaces from 0-3M of skins A, B, C, D,&E Were abrasive blasted to remove previously applied damaged undercoat and "Rust Stain" and repair damages to Base Metal and an SSPC SP-10 condition and Interzinc 22 undercoat was re-applied. The work will again be damaged after the stiffeners are installed as the fabrication is incomplete on the stiffeners to be installed.

OBG 7DE

Base Metal surfaces of the internal floor areas were abrasive blasted for VT inspection of welds and identification and amendment of fabrication defects and grinding of scars, burrs, sharp edges, prior to full SSPC SP-10 cleaning. Defects were mapped accordingly by Caltrans QA welding personnel.

Sub-Assemblies

Base Metal surfaces of 108 Splice Plates were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 undercoat was applied. Splice Plate codes: X83B quantity 50 and X103F quantity 58.

Office

Attend to report writing and project documentation.

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
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Reviewed By:	Peterson,Art	QA Reviewer
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