

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-003274**Date Inspected:** 10-May-2011**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:** Coatings Inspection**Bridge No:** 34-0006**Component:** Sub-Assemblies (OBG) and Sub-Assemblies**Bid Item:** 77,78,79**Lot No:****Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. Kenneth W. Cason Jr. arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections is to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

Sub-Assemblies (OBG)

Bike Path Panels BK4A-062, BK4A-060 and BK5A-002, NOI Number 6583: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Bike Path Panels BK4A-062, BK4A-060 and BK5A-002 for dry film thickness (DFT) and final VT compliance. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection prior to proceeding with process to the next check point due to debris found in finish coat.

Suspender Brackets SB110W, SB108E, and SB110E, NOI Number 6584: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Suspender Brackets SB110W, SB108E, and SB110E for dry film thickness (DFT) and final VT compliance. Recorded DFT readings were low out of specification range. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection.

Slices (17 Each), NOI Number 6585: In accordance with project specifications, ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Slices (17 Each) in preparation for blasting

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operations. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Slices (17 Each), NOI Number 6587: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Slices (17 Each). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Bike Path Panels BK15-001 PP113 and BK16A-001 PP115, NOI Number 6588: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Bike Path Panels BK15-001 PP113 and BK16A-001 PP115 was tested in accordance with SSPC-SP 1 (Surface Cleanliness) and SSPC PA-2 (DFT). Recorded DFT readings were low out of specification range. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection.

Bike Path Panels BK15-001 PP113 and BK16A-001 PP115, NOI Number 6589: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Bike Path Panels BK15-001 PP113 and BK16A-001 PP115 was tested in accordance with SSPC-SP 1 (Surface Cleanliness) and SSPC PA-2 (DFT). Recorded DFT readings were low out of specification range and holidays found in undercoat. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection.

Bike Path Panels BK4A-062, BK4A-060 and BK5A-002, NOI Number 6592: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Bike Path Panels BK4A-062, BK4A-060 and BK5A-002 for dry film thickness (DFT) and final VT compliance. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Emergency Access Platform Handrails BK-MEP-1 (2 each), NOI Number 6593: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Emergency Access Platform Handrails BK-MEP-1 (2 each). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Bike Path Panels BK15-001 PP113 and BK16A-001 PP115, NOI Number 6595: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Bike Path Panels BK15-001 PP113 and BK16A-001 PP115 was tested in accordance with SSPC-SP 1 (Surface Cleanliness) and ASTM D4752 (MEK Resistance of Ethyl Silicate (Inorganic) Zinc-Rich Primers by Solvent Rub). ABF Quality Assurance personnel instructed ZPMC to re-submit for inspection prior to proceeding with process to the next check point due to un-cured Interzinc 22 on surface.

Flumes (7 Each), NOI Number 6596: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Flumes (7 Each) was tested in accordance with SSPC-SP 1 (Surface Cleanliness) and ISO 11127-6 and ISO 11127-7 (soluble salts). Test results recorded x3 surface profile readings in the range of 68 to 80 μm and x1 soluble salts reading recorded @ 10.3 ($\mu\text{s/cm}$). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

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West Anchor Plates WAAD-011 (4 Each), NOI Number 6598: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on West Anchor Plates WAAD-011 (4 Each) was tested in accordance with SSPC-SP 1 (Surface Cleanliness) and SSPC PA-2. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to mud cracking found in undercoat.

Suspender Brackets SB110W, SB108E, SB110E and Flumes (16 Each), NOI Number 6600: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Suspender Brackets SB110W, SB108E, SB110E and Flumes (16 Each) for dry film thickness (DFT) and final VT compliance. Recorded DFT readings were low out of specification range on Flumes (16 Each) and ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection. No other discrepancies noted on remaining items and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Sub-Assemblies (Tower)

Splices for Tower Boom Support (6 Each) and I-Beam TBSA7-5 (2 Each), NOI Number T2152A: In accordance with project specifications, ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Splices for Tower Boom Support (6 Each) and I-Beam TBSA7-5 (2 Each) in preparation for blasting operations. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Skirt Plate Externals and Tower Curved Diaphragm Internal DPSA6-5, NOI Number T2153: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Skirt Plate Externals and Tower Curved Diaphragm Internal DPSA6-5 for dry film thickness (DFT) and final VT compliance. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Splices for Tower Boom Support (6 Each) and I-Beam TBSA7-5 (2 Each), NOI Number T2154: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Splices for Tower Boom Support (6 Each) and I-Beam TBSA7-5 (2 Each). Test results recorded x3 surface profile readings in the range of 77 to 82 μm . No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Man Hole Cover Plates for West Tower WSD1-FASA6-4-PC6-71 (3 Each), NOI Number T2155: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Man Hole Cover Plates for West Tower WSD1-FASA6-4-PC6-71 (3 Each) for dry film thickness (DFT) and final VT compliance. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection prior to proceeding with process to the next check point due to debris found in finish coat.

Galvanized Man Hole Cover Plates (5 Each), NOI Number T2156: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Galvanized Man

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Hole Cover Plates (5 Each). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Skirt Plate Components SD1-A582 and ED1-A146, NOI Number T2157: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Skirt Plate Components SD1-A582 and ED1-A146 was tested in accordance with SSPC-SP 1 (Surface Cleanliness) and SSPC PA-2 (DFT). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to holidays in the applied undercoat.

Man Hole Cover Plates for West Tower WSD1-FASA6-4-PC6-71 (3 Each), NOI Number T2158: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Man Hole Cover Plates for West Tower WSD1-FASA6-4-PC6-71 (3 Each) for dry film thickness (DFT) and final VT compliance. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Splices for Tower Boom (4 Each), NOI Number T2160: In accordance with project specifications, ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Splices for Tower Boom (4 Each) in preparation for blasting operations. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Splices for Tower Boom (4 Each), NOI Number T2161: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Splices for Tower Boom (4 Each). Test results recorded x3 surface profile readings in the range of 68 to 85 μm . No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Skirt Plate Components SD1-A582 and ED1-A146, NOI Number T2162: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Skirt Plate Components SD1-A582 and ED1-A146 was tested in accordance with SSPC-SP 1 (Surface Cleanliness) and ISO 11127-6 and ISO 11127-7 (soluble salts). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Office

This Quality Assurance Inspector (QA) reviewed, recorded and entered data from notice of inspection requests for the purpose of tracking and compliance to contract documents.

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

Summary of Conversations:

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 , who represents the Office of Structural Materials for your project.

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Inspected By:	Cason, Kenneth	Quality Assurance Inspector
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Reviewed By:	Miller, Mark	QA Reviewer
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