

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 MATERIALS ENGINEERING AND TESTING 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
 FAX: (707) 649-5493



Contract # : 04-0120S4
 Cty SF Rte 80 PM 12.7/13.2
 File # 1.25 B

QUALITY ASSURANCE - NONCONFORMANCE REPORT

Location: C-Trans, Oakland, CA**JOBSITE NCR** **Date:** 12/19/11**Prime Contractor:** MCM Construction Inc.**NCR #4****Submitting Contractor:** Schwager Davis Incorporated (SDI)**Type of problem:****Welding** **Concrete** **Other** **Welding:** **Curing:** **Procedural:** **Bridge No.** 34-0006**Joint fit-up:** **Coating:** **Other:** **Component:** Post Tensioning Tendon**Procedural:** **Procedural:** _____

Description of Non-Conformance: It was observed during the coiling of post tensioning tendon bundle # 044 that one of the 13 strands had been physically damaged (bent). See photo below. The bent strand was not removed and is currently in the bundle.

Applicable reference: Contract Special Provisions 50-1.05 "Prestressing steel that has sustained physical damage at any time shall be rejected."

Who discovered the problem: QA Inspector , Craig Hager**Name of individual from Contractor notified:** Stuart Smith, SDI Foreman**Time and method of notification:** 12/19/11, 0900, verbal**Name of Caltrans Engineer notified:** Bill Howe**Time and method of notification:** 12/19/11, 1300, verbal**QC Inspector's Name:** Stuart Smith**Was the QC Inspector aware of problem:** Yes**Contractor's proposal to correct the problem:** None provided at this time.

QUALITY ASSURANCE - NONCONFORMANCE REPORT

(Continued, Page 2 of 2)

Comments: This report is for the purpose of determining general 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 Aaron Prchlik (510) 610-9822, who represents the Office of Structural Materials for your project.

Inspected By: Craig Hager

Quality Assurance Inspector

Reviewed By: Bill Levell

Lead QA Reviewer

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Contract # : 04-0120S4
 Cty SF Rte 80 PM 12.7/13.2
 File # 1.9

REPORT OF INSPECTION OF MATERIAL**Resident Engineer** Bill Howe**Date Inspected:** 1/6/12**Address:** 325 Burma Road**City:** Oakland, CA 94607**Project Name:** Yerba Buena Island Transition Structure**OSM Arrival Time:** 0700**Prime Contractor:** MCM Construction Inc.**OSM Departure Time:** 1700**Contractor:** Schwager Davis Inc.**Location:** C-Trans, Oakland, CA

The following material has been inspected in accordance with Section 6 of the Standard Specifications and found to substantially comply* with contract plans and specifications.

Lot #	Bid Item #	Quantity	Material Description
B219-001-12	87/88	101	bundles of Post Tensioning (PT) strand identified as 001 thru 005, 007 thru 042, 046 thru 048 and 050 thru 106 (all 13-strand bundles)
B219-001-12	87/88	7	bundles of Post Tensioning (PT) strand identified as 107 thru 113 (all 14-strand bundles)
B219-001-12	87/88	2.	bundles of Post Tensioning (PT) strand identified as 114 and 115 (both 11-strand bundles)
B219-001-12	87/88	1	bundle of Post Tensioning (PT) strand identified as 116 (9-strand bundle)
B219-001-12	87/88	1	bundle of Post Tensioning (PT) strand identified as 117 (10-strand bundle)
B219-001-12	87/88	1	bundle of Post Tensioning (PT) strand identified as 118 (7-strand bundle)
B219-001-12	87/88	1	bundle of Post Tensioning (PT) strand identified as 044 (12-strand bundle)
		Total 114	

Identification: Orange Tag attached to each strand pack**Shipped to:** Jobsite

Summary of Items Observed and Conversations: This Quality Assurance (QA) Inspector, Craig Hager, was requested to release the material listed above to the jobsite by Schwager Davis Incorporated (SDI) for use on the WB-2 section of the YBI Transition Project in Oakland, CA.

This QA Inspector arrived on site at C-Trans in Oakland, CA as requested at 0700 hours to meet with SDI personnel Rudy Schmitt, SDI personnel Rudy Schmitt was not present. This QA Inspector met with SDI Foreman Stuart Smith and was informed the first load of 4 bundles (006, 043, 045 and 049) had been shipped at 0620 hours this date, without being released. This QA Inspector asked SDI Foreman Stuart Smith if he could contact SDI personnel Rudy Schmitt to determine when the documents for the release of the material would be present. SDI Foreman Stuart Smith contacted SDI personnel Ruddy Schmitt and was informed he would be present shortly. This QA Inspector met with SDI personnel Ruddy Schmitt at approximately 0730 hours was presented with a Certificate Of Compliance (COC) for each of the 118 bundles of PT strand and several printed copies of the QC Log.

This QA Inspector preformed a review of the documents provide and observed the following; The COC's specified a specific bundle, indicating the heat number of the strands for the bundle and the number of strands therefore traceable to the SDI QC Log. The QC Log specified the required information such as the bundle number, the specific coil at number, number of strands, area (A value) of strand and modules of elasticity (E value) for each coil of strand

REPORT OF INSPECTION OF MATERIAL

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and the averaged values for each bundle. This QA Inspector observed the A and E values for all the coils of strand were the same; .223-square inches for the Area and 28.5 for the Elasticity value. This QA Inspector also observed all the averaged values for the Elasticity had been rounded up to 29. This QA Inspector reviewed several of the certifications provided by Sumiden Wire Products (strand manufacturer) and observed the areas appeared to have rounded up and that most of the E-values appeared to be 28.0. This QA Inspector informed SDI personnel Ruddy Schmitt of these observations and asked where he had obtained his data and why there appeared to be a difference. SDI personnel Ruddy Schmitt stated he did not have the same data as observed on the certificate provided by Sumiden Wire Products and that he only had the data for each heat of steel not for each specific coil.

This QA Inspector contacted Structural Material Representative (SMR) Aaron Prchlik regarding the documents and was informed the COC could be used for the release of the material at this time but that SDI would need to use the correct A and E values for the QC Log, which could be presented later.

This QA Inspector proceeded with the release of the remaining 114 bundles of strand. See above for the specific bundles and below for typical photos.



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Inspected By: Craig Hager

Quality Assurance Inspector

Reviewed By: Bill Levell

QA Reviewer

*Based on random sampling, testing and inspection procedures. Subject to final inspection by the Resident Engineer.



PRE-FABRICATION										
TAG ID NO.	PREFAB DATE	PREFAB LENGTH (FT)	BUNDLE STRAND QUANTITY	STRANDS PER PACK	MATERIAL INFORMATION					
					STRAND PACK NO.'S	STRAND HEAT NO.'S	STRAND AREA (by pack)	STRAND E-MODULUS (by pack)	STRAND E-MODULUS (Avg. by tendon)	STRAND E-MODULUS (Avg. by tendon)
043	12-16-11	1107	13	11 - 2	S324423	S5AJ511				
				11 - 2	S321828	S2CC793				
				111 - 3	S325330	S2DF006				
				111 - 3	S325426	S2DF031				
				111 - 3	S321822	S2CC793				
044	12-17-11	1107	13	11 - 3	S324423	S5AJ511				
				111 - 3	S321828	S2CC793				
				1 - 1	S325330	S2DF006				
				1 - 1	S325426	S2DF031				
				11 - 2	S321822	S2CC793				
				1 - 1	S321817	S2CC793				
				1 - 1	S321819	S2CC793				
1 - 1	S321818	S2CC793								
045	12-17-11	1107	13	1 - 1	S324423	S5AJ511				
				111 - 3	S321819	S2CC793				
				111 - 3	S321818	S2CC793				
				111 - 3	S321817	S2CC793				
				11 - 2	S321810	S2CC793				
				1 - 1	S321809	S2CC793				
046	12-17-11	1107	13	111	S321819	S2CC793				
				111	S321818	S2CC793				
				111	S321817	S2CC793				
				111	S321810	S2CC793				
				111	S321809	S2CC793				

SDI SUPERVISOR:

Print/Sign

Date

SDI PROJECT MANAGER:

Print/Sign

Date

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Contract # : 04-0120S4
 Cty ALA Rte 80 PM 1.6/2.7
 File # 1.25A

QUALITY ASSURANCE - NONCONFORMANCE RESOLUTION

Location: C-Trans, Oakland, CA

Date: 01/07/2014

Prime Contractor: MCM Construction Inc.

NCR# 4

Submitting Contractor: Schwager Davis Incorporated (SDI)

Type of problem:

Welding	<input type="checkbox"/>	Concrete	<input type="checkbox"/>	Other	<input checked="" type="checkbox"/>
Welding:	<input type="checkbox"/>	Curing:	<input type="checkbox"/>	Procedural:	<input checked="" type="checkbox"/>
Joint fit-up:	<input type="checkbox"/>	Coating:	<input type="checkbox"/>	Other:	<input type="checkbox"/> <<Other Problem Type>>
Procedural:	<input type="checkbox"/>	Procedural:	<input type="checkbox"/>		

Bridge No . 34-0006

Component Post Tensioning Tendon

Date nonconformance report was written: 12/19/2011

Description of Non-Conformance: It was observed during the coiling of post tensioning tendon bundle #044 that one of the 13 strands had been physically damaged (bent). The bent strand was not removed and is currently in the bundle.

Contractor's proposal to correct the problem: Contractor to propose a resolution.

Corrective action taken: The bent strand, noted as a 7 inch "bird cage", was removed from the bundle before release on January 6th of 2012. The QA Inspector, Craig Hager, orange tagged the "bundle of Post Tensioning (PT) strand identified as 044 (12-strand bundle)." The material was inspected in accordance with Section 6 of the Standard Specifications and found to substantially comply with contract plans and specifications.

Did corrective action require Engineer's approval? Yes No

If so, name of the Engineer providing approval:

Date:

Is Engineer's approval attached: Yes No

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Inspected By: Courtney Goldstein

Quality Assurance Inspector

Reviewed By: Ken Riley

QA Reviewer