

**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 # : 04-0120E4  
 Cty SF Rte 80 PM 13.4/13.8  
 File # 1.25 B

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**QUALITY ASSURANCE - NONCONFORMANCE REPORT**


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**Location:** T1 Pile Head Connection Plates (PHCP) 9H3**Date:** 07-05-2007**Prime Contractor:** Kiewit/FCI/Manson-KFM-JV**NCR #174****Submitting Contractor:** Kiewit/FCI/Manson-KFM-JV**Type of problem:****Welding**  **Concrete**  **Other** **Welding:**  **Curing:**  **Procedural:**  **Bridge No.** 34-0006 L / R**Joint fit-up:**  **Coating:**  **Other:**  **Component:** T1 Foundation Footing**Procedural:**  **Procedural:**  Loss of preheat temperature

**Description of Non-Conformance:** The Contractor failed to maintain the preheat temperature during the welding of T1 pile head connection plate (PHCP) as required by Caltrans Special Provisions, Section 10-1.31, Field Welding of Pile/Sleeve Connection Plates, Line F. The loss in preheat (approximately 200-degrees Fahrenheit) occurred on PHCP pile 9, plate H, weld 3 where there were several subsequent weld passes which were deposited prior to the loss of heat.

**Applicable reference:** Caltrans Special Provisions, Section 10-1.31, Field Welding of Pile/Sleeve Connection Plates, Line F

**Who discovered the problem:** Quality Assurance Inspector; Raymond Lara

**Name of individual from Contractor notified:** KFM Welding Superintendent, Dennis Winter

**Time and method of notification:** 07/05/07 at approximately 1100 via verbal notification.

**Name of Caltrans Engineer notified:** Caltrans Assistant Structure Representative; Doug Wright and Structure Representative, Mark Vilcheck

**Time and method of notification:** 07/05/07 at approximately 1100 hours via verbal notification (Wright) and at approximately 1315 hours (Vilcheck)

**QC Inspector's Name:** Mr. Heydar Alakbarov

**Was the QC Inspector aware of problem:** No

**Contractor's proposal to correct the problem:** Bring the weld up to the required minimum preheat temperature and perform magnetic particle testing prior to welding.

**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 Ryan Smith, (858) 232-6799, who represents the Office of Structural Materials for your project.

Inspected By: Raymond Lara 

Quality Assurance Inspector

Reviewed By: Albert Carreon/ Bill Levell 

Lead QA Reviewer

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NCR #174

Submitting Contractor: Kiewit/FCI/Manson-KFM-JV

Type of problem:

- Welding [X] Concrete [ ] Other [ ]
Welding: [X] Curing: [ ] Procedural: [ ] Bridge No. 34-0006 L / R
Joint fit-up: [ ] Coating: [ ] Other: [ ] Component: T1 Foundation Footing
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007040 JUL-66 RECEIVED

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**DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge Program**

333 Burma Rd.  
Oakland, CA 94607  
(510) 286-0538, (510) 286-0550 fax



Kiewit-FCI-Manson, JV  
220 Burma Rd.  
Oakland, CA 94607

July 26, 2007

Attn: Mr. Terry Hipes  
Welding Quality Control Manager

Contract No. 04-0120E4  
04-SF-80-13.4, 13.8  
SAS T1 & E2 Foundations  
SFOBB-ESSSP

Letter No. 05.003.01-003317

Subject: NCR - Kiewit-FCI-Manson, 7/05/07 (Failure to Maintain Preheat)  
Response to Submittal No. 1501, Revision No. 00 (KFM NCR 26)

Dear Terry,

The Department issued a Non-conformance Report (NCR) at the SAS T1/E2 Foundations project site on July 5, 2007. The NCR was generated when the Contractor failed to maintain the preheat temperature as required by the Special Provisions, Section 10-1.31, Subsection "Field Welding of Pile/Sleeve Connector Plates," Line F, during welding of Pier T1 Pile Head Connection Plate (PHCP) at pile 9, plate H, weld 3. QA verbally notified Mr. Dennis Winter, KFM Welding Superintendent, of this non-conformance on July 5, 2007.

The Department has reviewed Kiewit-FCI-Manson (KFM) Submittal No. 1501, Revision No. 00, dated July 6, 2007, which contained KFM NCR No. 26, issued to document the same issue of the above NCR. The Department understands that the Contractor has taken measures to prevent future occurrences of operator error regarding the heating equipment.

If you have any questions or need additional information, please contact Mark Vilcheck at (510) 286-0526.

Sincerely,

Mark Vilcheck  
Structure Representative

For: Pedro J. Sanchez  
Resident Engineer

cc: P. Sanchez  
M. Woods  
R. Smith

file: 05.003.01, 09.006.03, 09.013, 55.1501