

**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

**QUALITY ASSURANCE - NONCONFORMANCE REPORT****Location:** E2 West Foundation**Date:** 04-23-07\*revised**Prime Contractor:** Kiewit/FCI/Manson-KFM-JV**NCR #158****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:** E2E foundation footing  
**Procedural:**  **Procedural:**  **Loss of preheat temperature**

**Description of Non-Conformance:** The Contractor failed to maintain the preheat temperature during the welding of E2W pile head connector plates (PHCP) as required by Caltrans Special Provisions, Section 10-1.31, Field Welding of Pile/Sleeve Connector Plates, Line F. The loss in preheat occurred on pile head connector plate weld (PHCP) Pile 1D4. A subsequent weld pass had been deposited on top of the root pass prior to the loss of heat.

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

**Who discovered the problem:** KFM Superintendent, Joel Dodd on \*04-20-07\*

**Name of individual from Contractor notified:** KFM Superintendent, Joel Dodd

**Time and method of notification:** 04/23/07 at approximately 06:00 via telephone notification

**Name of Caltrans Engineer notified:** Mark Vilcheck, Caltrans Structure Representative

**Time and method of notification:** 1100 hours, 4-23-2007 via telephone notification

**QC Inspector's Name:** KFM/ISI QC Kevin Carpenter

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

**Contractor's proposal to correct the problem:** The contractor issued a non-conformance report (NCR #15). The Contractor has elected to leave the weld in place and perform magnetic particle testing, bring the weld up to the required minimum preheat, and commence 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: Bill Levell 

Quality Assurance Inspector

Reviewed By: Albert Carreon 

Lead QA Reviewer

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Date: 04-23-07\*revised

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

NCR #158

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Welding [X] Concrete [ ] Other [ ]
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Procedural: [X] Procedural: [ ] Loss of preheat temperature

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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

Attn: Mr. Dan Proctor

July 19, 2007

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

Letter No. 05.003.01-003308

Subject: Response to KFM Letter No. 286 (Request for Preheat Loss Investigation)

Dear Dan,

The Department has reviewed Kiewit-FCI-Manson (KFM) Letter No. 286 dated July 3, 2006, which provided a description of the occurrences, locations, causes and remedial measures taken by the Contractor, for two NCRs dated April 8, 2007, two NCRs dated April 20, 2007, and an NCR dated April 23, 2007, all for failures to maintain pre-heat during welding at Pier E2. KFM Letter No. 286 responded to the Department's Letter Nos. 3065, 3066, 3067, 3068, and 3069, all dated April 30, 2007. The Department understands that the Contractor has taken preventive measures to ensure that installation issues and equipment problems related to the Contractor's failure to maintain pre-heat. The Department considers the two NCRs dated April 8, 2007, the two NCRs dated April 20, 2007, and the NCR dated April 23, 2007, to be resolved.

If you have any questions or need additional information, please contact Mark Woods at (510) 622-5107.

Sincerely,

Mark P. Woods  
Senior Bridge Engineer

For: Pedro J. Sanchez  
Resident Engineer

cc: M. Vilcheck  
P. Sanchez  
M. Woods  
R. Smith

file: 05.003.01, 09.006.03, 55.1413, 55.1422, 55.1424, 55.1425, 55.1481