

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: T1 Pile Head Connection Plates (PHCP) 9H3

Date: 07-10-2007

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

NCR #175

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
Procedural: [X] 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 occurred on PHCP pile 12, plate F, welds 1 & 2 where there were several subsequent weld passes which were deposited prior to the loss of heat. It was noted the heat loss occurred at the bottom 150 mm of the weld of both welds #1 and #2.

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

Who discovered the problem: Caltrans Structures Representative Doug Wright

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

Time and method of notification: 07/10/07 at approximately 0900 via verbal notification.

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

Time and method of notification: 07/10/07 at approximately 0900 hours via verbal notification (Wright) and on 07/11/07 at approximately 1100 hours (Vilcheck) via verbal notification.

QC Inspector's Name: QC Inspector 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: Richard Dennis Bettencourt

Quality Assurance Inspector

Reviewed By: Albert Carreon/ Bill Levell

Lead QA Reviewer

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. Terry Hipes
Welding Quality Control Manager

July 30, 2007

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

Letter No. 05.003.01-003334

Subject: NCR - Kiewit-FCI-Manson, 7/10/07 (Failure to Maintain Preheat)
Response to Submittal No. 1509, Revision No. 00 (KFM NCR 27 Preheat T1 12F 1,2)

Dear Terry,

The Department issued a Non-conformance Report (NCR) at the SAS T1/E2 Foundations project site on July 10, 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 12, plate F, weld 1 and 2. QA verbally notified Mr. Dennis Winter, KFM Welding Superintendent, of this non-conformance on July 10, 2007.

The Department has reviewed Kiewit-FCI-Manson (KFM) Submittal No. 1509, Revision No. 00, dated July 16, 2007, which contained KFM NCR No. 27, 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. However, please note that the Department is concerned that this is an issue with multiple reoccurrences.

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

Sincerely,

A handwritten signature in blue ink, appearing to read "Mark Vilcheck".

Mark Vilcheck
Structure Representative

For: Pedro J. Sanchez
Resident Engineer

cc: P. Sanchez
M. Woods
R. Smith

file: 05.003.01, 09.006.03, 09.011.06, 55.1509