

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:** SFOBB E2/T1 Foundations**JOBSITE NCR** **Date:** 10-06-2007**Prime Contractor:** Keiwit/FCI/Mason (KFM)-Joint Venture**NCR #**205**Submitting Contractor:** KFM**Type of problem:** Loss of preheat/interpass temperature**Welding** **Concrete** **Other** **Welding:** **Curing:** **Procedural:** **Bridge No.** 34-0006**Joint fit-up:** **Coating:** **Other:** **Component:** T1 Foundation**Procedural:** **Procedural:** Loss of Preheat/interpass Temperature at Pile 7-F2

Description of Non-Conformance: The Contractor (KFM) failed to maintain preheat temperature at pile head connector plate weld designated pile 7-F2. The temperature was observed to be below the minimum preheat temperature of 250°F was not maintained starting from the top radius to a measured cumulative length of 500mm within the weld zone. No production welding was being performed at the time the non-conformance was recorded. Random measurements were taken to verify the extent of the preheat temperature loss utilizing an infrared thermometer and temperature indicating markers and noted the temperature above the top radius at 180°F and noted a temperature range between 210°F to 218°F for the length noted above for pile 7-F2

Applicable reference: Caltrans Special Provisions, Section 10-1-1.31, Field Welding of the Pile/Sleeve Connection Plates, Line F

Who discovered the problem: Structure Representative, Art Pannu and Quality Assurance Inspector, Mike Garcia

Name of individual from Contractor notified: KFM Welding Supervisor, Bobby Harris

Name of Caltrans Engineer notified: Assistant Structure Representative, Art Pannu,

Time and method of notification: Oct 06, 2007 verbal notification

QC Inspector's Name: Jamie Boots

Was the QC Inspector aware of problem: no

Contractor's proposal to correct the problem: The Contractor elected to bring the base material back up the required minimum preheat/interpass temperature of 250° F utilizing a rosebud torch, perform a magnetic particle testing prior to the commencement of 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: Mike Garcia

Quality Assurance Inspector

Reviewed By: Albert Carreon

Lead QA Reviewer

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 Inspected By: Mike Garcia

Quality Assurance Inspector

 Reviewed By: Albert Carreon

Lead QA Reviewer

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RECEIVED

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

October 11, 2007

Attn: Mr. Rich Bienek
Welding Quality Control Manager

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

Letter No. 05.003.01-003549

Subject: NCR - Kiewit-FCI-Manson, 10/06/07 (Failure to Maintain Preheat)

Dear Rich,

The Department issued a Non-conformance Report (NCR) at the SAS T1/E2 Foundations project site on October 6, 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 7, weld F2. QA verbally notified Mr. Bobby Harris, KFM Welding Supervisor, of this non-conformance on October 6, 2007.

The Department understands that the Contractor returned the weld to the minimum preheat temperature and that MT was performed on the in-place weld prior to resuming welding. The Department considers this NCR to be closed. However future instances of loss of preheat will be documented as necessary.

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