

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 MATERIALS ENGINEERING AND TESTING SERVICES
 Office of Structural Materials
 Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120E4
 Cty SF Rte 80 PM 13.4/13.80
 File # 01 .25 B

QUALITY ASSURANCE - NONCONFORMANCE REPORT

Location: SFOBB Jobsite **JOBSITE NCR** **Date:** 09/04/2007

Prime Contractor: Kiewit/FCI/Manson (KFM) **NCR #197**

Submitting Contractor: KFM

Type of problem:

Welding **Concrete** **Other**
Welding: **Curing:** **Procedural:** **Bridge No.** 34-0006 L/R
Joint fit-up: **Coating:** **Other:** **Component:** T1 Foundation 4A4 and 2F3
Procedural: **Procedural:**

Description of Non-Conformance: The Contractor failed to maintain the pre-heat 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 4, plate A, weld 4 and pile 2, plate F, weld 3. Both loss of preheats occurred at approximately 120mm measuring down from the top termination. The QA Inspector performed temperature measurements utilizing Tempilstik heat indicators and observing a significant loss of the pre-heat temperature inside the bevel and the adjacent base metal at approximately 190 and 200 degrees Fahrenheit, respectively.

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

Who discovered the problem: Inspection Services Inc. Quality Control Inspector Dan Smith

Name of individual from Contractor notified: KFM General Welding Foreman Jim Belcher

Time and method of notification: 2000hrs-09/04/2007 – Verbal

Name of Caltrans Engineer notified: Assistant Structure Rep. Jason Wilcox

Time and method of notification: 2030hrs-08/13/2007 – Verbal

QC Inspector's Name: Dan Smith

Was the QC Inspector aware of problem: Yes

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Contractor's proposal to correct the problem: Bring the weld up to the required minimum preheat temperature, perform 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: Daniel L. Reyes

Quality Assurance Inspector

Reviewed By: Albert Carreon

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. Rich Bienek
Welding Quality Control Manager

September 6, 2007

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

Letter No. 05.003.01-003452

Subject: NCR - Kiewit-FCI-Manson, 9/04/07 (Failure to Maintain Preheat)

Dear Rich,

The Department issued a Non-conformance Report (NCR) at the SAS T1/E2 Foundations project site on September 4, 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 No. 4, plate A, and at pile No. 2, plate F. QA verbally notified Mr. Jim Belcher, KFM Welding Foreman, of this non-conformance on September 4, 2007.

The Department understands that the Contractor returned the weld to the minimum preheat temperature and that MT was performed on the in-place welds prior to resuming welding at these locations. 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