

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING 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
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.25B**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Changxing Island, Shanghai, PR China**Report No:** NCR-000789**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 06-Jul-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0751**Type of problem:**

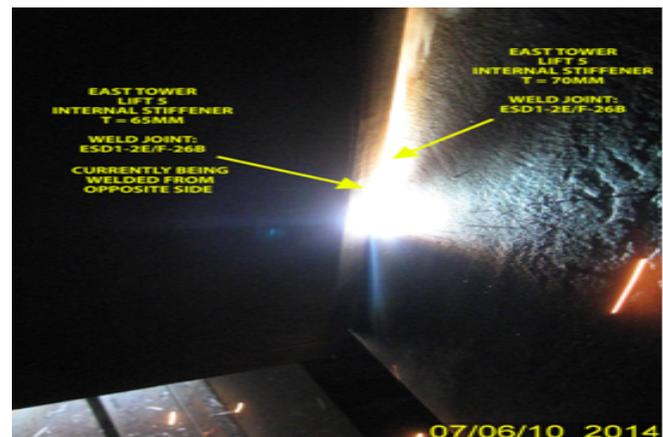
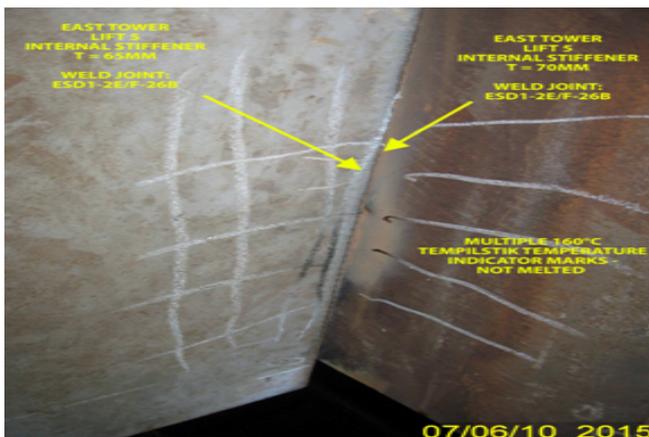
Welding	Concrete	Other
Welding	Curing	Procedural
Joint fit-up	Coating	Other
Procedural	Procedural	Description:

Bridge No: 34-0006**Component:** Grillage Internal Stiffeners, Lift 5, East Tower**Reference Description:** Insufficient Preheat for Welding**Description of Non-Conformance:**

Caltrans Quality Assurance (QA) Inspector observed ZPMC personnel performing Shielded Metal Arc tack Welding (SMAW) of weld joint ESD1-TL5-2E/F-26B, 65mm to 70mm grillage internal stiffeners located inside East Tower, Lift 5, approximately 300mm from bottom of Lift 5, without sufficient base material preheat as follows:

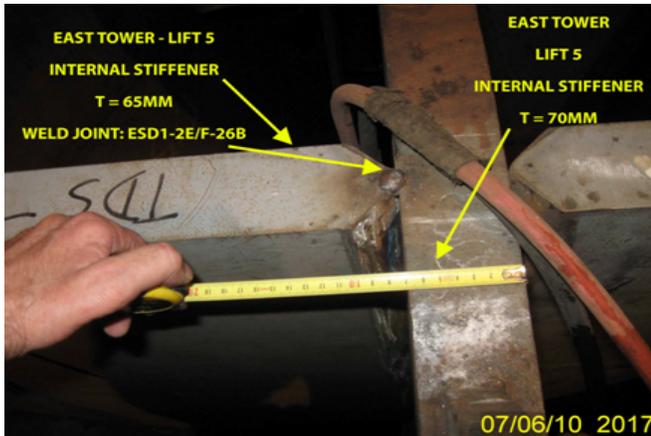
- Multiple 160°C Tempilstik temperature indicator marks applied by this QA Inspector to the adjacent base material within approximately 40mm from the point of welding did not melt.
- East Tower, Lift 5, is designated as A709M, HPS 485W-T2. WPS-B-T-3213-TC-U5b requires the minimum preheat and interpass temperature to be 160°C for material thickness more than 60mm.

Refer to photos below for additional information.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



Applicable reference:

AWS D1.5 (2002), Section 4.2.7 requires the base metal material to be at or above the specified minimum temperature for a distance not less than 75mm in all directions from the point of welding.

Who discovered the problem: George Goulet

Name of individual from Contractor notified: Cui Zhenghua

Time and method of notification: 2050 hours/ Verbal

Name of Caltrans Engineer notified: Jim Reid

Time and method of notification: 1430Hrs/ Verbal

QC Inspector's Name: Xu Jie, Liu Yang

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

N/A

Comments:

This report is for the purpose of determining 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 , who represents the Office of Structural Materials for your project.

Inspected By: Ng,Michael

QA Inspector

Reviewed By: Devey,Jim

SMR



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
 333 Burma Road
 Oakland CA 94607
 Tel: 510-286-0539 Fax: 510-286-0550

NON-CONFORMANCE REPORT TRANSMITTAL

To: AMERICAN BRIDGE/FLUOR, A JV
 375 BURMA ROAD
 OAKLAND CA 95607

Date: 12-Jul-2010

Contract No: 04-0120F4
 04-SF-80-13.2 / 13.9

Dear: Mr. Charles Kanapicki
Job Name: SAS Superstructure

Attention: Mr. Thomas Nilsson Project/Fabrication Manager
Document No: 05.03.06-000748

Subject: NCR No. ZPMC-0751

Reference Description: Insufficient Preheat for Welding/Tower/East/Lift 5 Internal Stiffeners

The attached Non-Conformance Report describes an occurrence where the contractor did not comply with a requirement of the contract document as indicated below:

- Material or Workmanship not in conformance with contract documents.
- Quality Control (QC) not performed in conformance with contract documents.
- Recurring QC issue that constitutes a systematic problem in quality control.
- Non-Conformance Resolved.

Material Location: Tower **Lift:** 05

Remarks:

Caltrans Quality Assurance (QA) Inspector observed ZPMC personnel performing Shielded Metal Arc tack Welding (SMAW) of weld joint ESD1-TL5-2E/F-26B, 65mm to 70mm grillage internal stiffeners located inside East Tower, Lift 5, approximately 300mm from bottom of Lift 5, without sufficient base material preheat as follows:

- Multiple 160°C Tempilstik temperature indicator marks applied by this QA Inspector to the adjacent base material within approximately 40mm from the point of welding did not melt.
- East Tower, Lift 5, is designated as A709M, HPS 485W-T2. WPS-B-T-3213-TC-U5b requires the minimum preheat and interpass temperature to be 160°C for material thickness more than 60mm.

References:

AWS D1.5 (2002), Section 4.2.7 requires the base metal material to be at or above the specified minimum temperature for a distance not less than 75mm in all directions from the point of welding.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance item and document that the deficiency has been brought into compliance with contract requirements. Also propose a resolution that addresses the apparent failure of Quality Control to identify the non-conformance with the appropriate Welding Procedure Specification (WPS). Provide documentation of the steps taken by the Quality Control Manager to prevent future occurrences.

The response for the resolution of this issue is requested within 7 days.

Transmitted by: Gina Rizzardo Transportation Engineer
Attachments: ZPMC-0751

NCT

(Continued Page 2 of 2)

cc: Rick Morrow, Gary Pursell, Mark Woods

File: 05.03.06

NCR PROPOSED RESOLUTION

To: CALTRANS - SAS Superstructure
333 Burma Road
Oakland CA 94607

Attention: Siegenthaler, Peter
Resident Engineer

Ref: 05.03.06-000748

Subject: NCR No. ZPMC-0751

Dated: 21-Sep-2010

Contract No.: 04-0120F4
04-SF-80-13.2 / 13.9

Job Name: SAS Superstructure

Document No.: ABF-NPR-000785 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC acknowledges that there was insufficient preheat during welding and will provide NDT documentation after NDT is complete to show that the weld is acceptable.

ZPMC acknowledges that there was insufficient preheat during welding and will provide NDT documentation after NDT is complete to show that the weld is acceptable. In this case, the foreman and inspector involved have been fined to reinforce the severity of this non conformance and to prevent future occurrences and ensure that the WPS parameters are followed. ABFJV and ZPMC Both ABFJV and ZPMC have in place a program to track when non conformances occur and who the responsible inspector was at the time it occurred that could have stopped the non conformance from occurring. Based on these actions and forthcoming acceptable NDT, ZPMC requests that this proposal be approved with actions pending.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000785R00;

Caltrans' comments:

Status: AAP

Date: 21-Sep-2010

This proposed resolution is accepted with action pending. This NCR will be considered closed once the proper NDT documentation is submitted and reviewed.

Submitted by: Eagen, Sean

Attachment(s):

Date: 21-Sep-2010



No. T-165

LETTER OF RESPONSE

TO: American Bridge/Flour JV

DATE: 2010-09-20

REGARDING: NCR-000789(ZPMC-0751)

ZPMC received NCR-000789(ZPMC-0751), it mentioned that QA observed ZPMC personnel performing SMAW welding on weld joint ESD1-TL5-2E/F-26B without sufficient base metal preheat.

ZPMC had realized this problem and all the welds shall be sufficient preheated according to relevant WPS requirements. Also, ZPMC had inculcated the foreman to enhance the management and control of welding and it must be checked by QC before and during welding. In order to improve their quality performance in the future, necessary economy punishment for them had been carried out for warning, and this would make a deep reflection in their brain.

The related NDT reports will be provide later to show the weld is sound, basing on above ZPMC hope CT could take a review and close this NCR.

ATTACHMENT:

NCR-000789(ZPMC-0751)

Zhang Lian (Kew)

2010. 9. 20



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
333 Burma Road
Oakland CA 94607
Tel: 510-286-0539 Fax: 510-286-0550

NON-CONFORMANCE REPORT TRANSMITTAL

To: AMERICAN BRIDGE/FLUOR, A JV
375 BURMA ROAD
OAKLAND CA 95607

Date: 12-Jul-2010

Contract No: 04-0120F4
04-SF-80-13.2 / 13.9

Dear: Mr. Charles Kanapicki
Attention: Mr. Thomas Nilsson Project/Fabrication Manager
Subject: NCR No. ZPMC-0751

Job Name: SAS Superstructure
Document No: 05.03.06-000748

Reference Description: Insufficient Preheat for Welding/Tower/East/Lift 5 Internal Stiffeners

The attached Non-Conformance Report describes an occurrence where the contractor did not comply with a requirement of the contract document as indicated below:

- Material or Workmanship not in conformance with contract documents.
- Quality Control (QC) not performed in conformance with contract documents.
- Recurring QC issue that constitutes a systematic problem in quality control.
- Non-Conformance Resolved.

Material Location: Tower Lift: 05

Remarks:

Caltrans Quality Assurance (QA) Inspector observed ZPMC personnel performing Shielded Metal Arc tack Welding (SMAW) of weld joint ESD1-TL5-2E/F-26B, 65mm to 70mm grillage internal stiffeners located inside East Tower, Lift 5, approximately 300mm from bottom of Lift 5, without sufficient base material preheat as follows:

- Multiple 160°C Tempilstik temperature indicator marks applied by this QA Inspector to the adjacent base material within approximately 40mm from the point of welding did not melt.
- East Tower, Lift 5, is designated as A709M, HPS 485W-T2. WPS-B-T-3213-TC-U5b requires the minimum preheat and interpass temperature to be 160°C for material thickness more than 60mm.

References:

AWS D1.5 (2002), Section 4.2.7 requires the base metal material to be at or above the specified minimum temperature for a distance not less than 75mm in all directions from the point of welding.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance item and document that the deficiency has been brought into compliance with contract requirements. Also propose a resolution that addresses the apparent failure of Quality Control to identify the non-conformance with the appropriate Welding Procedure Specification (WPS). Provide documentation of the steps taken by the Quality Control Manager to prevent future occurrences.

The response for the resolution of this issue is requested within 7 days.

Transmitted by: Gina Rizzardo Transportation Engineer

Attachments: ZPMC-0751

02.02.15.04
05.03.06-000748,NCT

Received
NCT-000748 12 Jul 10 Page 1 of 2

NCT

(Continued Page 2 of 2)

cc: Rick Morrow, Gary Pursell, Mark Woods

File: 05.03.06

DEPARTMENT OF TRANSPORTATION
 DIVISION OF ENGINEERING 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
 (707) 649-5493

Contract #: 04-0120F4
 Cty: SF/ALA Rte: 80 PM: 13.2/13.9
 File #: 69.25B

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Changxing Island, Shanghai, PR China

Report No: NCR-000789

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 06-Jul-2010

Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

NCR #: ZPMC-0751

Type of problem:

Welding Concrete Other

Welding Curing Procedural

Joint fit-up Coating Other

Procedural Procedural Description:

Bridge No: 34-0006

Component: Grillage Internal Stiffeners, Lift 5, East Tower

Reference Description: Insufficient Preheat for Welding

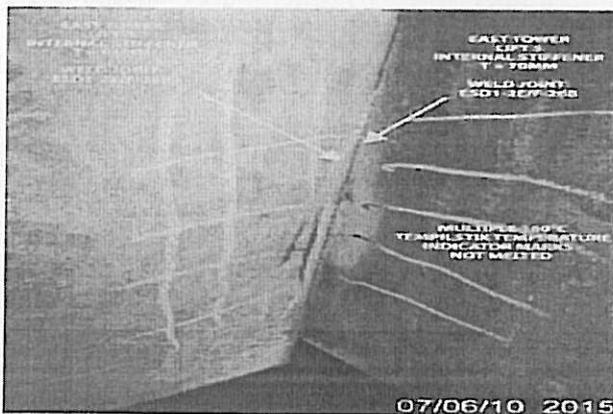
Description of Non-Conformance:

Caltrans Quality Assurance (QA) Inspector observed ZPMC personnel performing Shielded Metal Arc tack Welding (SMAW) of weld joint ESD1-TL5-2E/F-26B, 65mm to 70mm grillage internal stiffeners located inside East Tower, Lift 5, approximately 300mm from bottom of Lift 5, without sufficient base material preheat as follows:

- Multiple 160°C Tempilstik temperature indicator marks applied by this QA Inspector to the adjacent base material within approximately 40mm from the point of welding did not melt.

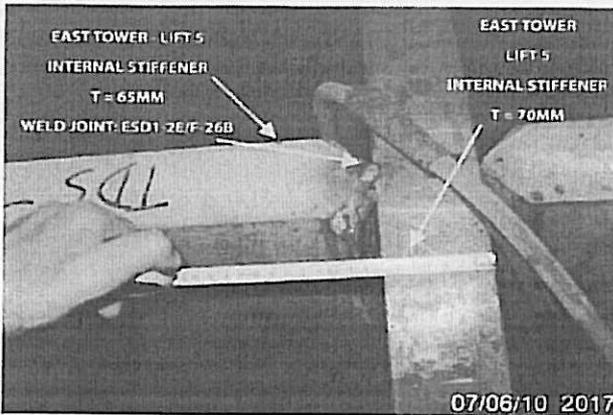
- East Tower, Lift 5, is designated as A709M, HPS 485W-T2. WPS-B-T-3213-TC-U5b requires the minimum preheat and interpass temperature to be 160°C for material thickness more than 60mm.

Refer to photos below for additional information.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



Applicable reference:

AWS D1.5 (2002), Section 4.2.7 requires the base metal material to be at or above the specified minimum temperature for a distance not less than 75mm in all directions from the point of welding.

Who discovered the problem: George Goulet

Name of individual from Contractor notified: Cui Zhenghua

Time and method of notification: 2050 hours/ Verbal

Name of Caltrans Engineer notified: Jim Reid

Time and method of notification: 1430Hrs/ Verbal

QC Inspector's Name: Xu Jie, Liu Yang

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

N/A

Comments:

This report is for the purpose of determining 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 , who represents the Office of Structural Materials for your project.

Inspected By: Ng,Michael

QA Inspector

Reviewed By: Devey,Jim

SMR

NCR PROPOSED RESOLUTION

To: CALTRANS - SAS Superstructure
333 Burma Road
Oakland CA 94607

Attention: Siegenthaler, Peter
Resident Engineer

Ref: 05.03.06-000748

Subject: NCR No. ZPMC-0751

Dated: 14-Oct-2010

Contract No.: 04-0120F4
04-SF-80-13.2 / 13.9

Job Name: SAS Superstructure

Document No.: ABF-NPR-000785 Rev: 01

Contractor's Proposed Resolution:

Reference Resolution: ZPMC is providing NDT of the weld to show that despite the insufficient preheat the weld is still acceptable.

ZPMC is providing NDT of the weld to show that despite the insufficient preheat the weld is still acceptable. This particular non conformance is not a common occurrence recently, discussions with the QC and workers as well as the NCR issued by ZPMC's QA should prevent this occurrence from becoming systematic. If this issues does become increasingly frequent, ABFJV will provide more formalized training to deal with this issue. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000785R01;

Caltrans' comments:

Status: CLO

Date: 14-Oct-2010

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0751 is closed.

Submitted by: Eagen, Sean

Attachment(s):

Date: 14-Oct-2010



No. T-174

LETTER OF RESPONSE

TO: American Bridge/Flour JV

DATE: 2010-10-14

REGARDING: NCR-000789(ZPMC-0751)

ZPMC received NCR-000789(ZPMC-0751), it mentioned that QA observed ZPMC personnel performing SMAW welding on weld joint ESD1-TL5-2E/F-26B without sufficient base metal preheat.

Basing on ABF-NPR-000785, here provides related NDT reports to show the welds be sound, since ZPMC hope CT could take a review and close this NCR.

ATTACHMENT:

NCR-000789(ZPMC-0751)

T787-UT-3251

Zhang Wadi

2010. 10-14



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
 333 Burma Road
 Oakland CA 94607
 Tel: 510-286-0539 Fax: 510-286-0550

NON-CONFORMANCE REPORT TRANSMITTAL

To: AMERICAN BRIDGE/FLUOR, A JV Date: 12-Jul-2010
 375 BURMA ROAD
 OAKLAND CA 95607 Contract No: 04-0120F4
 04-SF-80-13.2 / 13.9
 Dear: Mr. Charles Kanapicki Job Name: SAS Superstructure
 Attention: Mr. Thomas Nilsson Project/Fabrication Manager Document No: 05.03.06-000748
 Subject: NCR No. ZPMC-0751
 Reference Description: Insufficient Preheat for Welding/Tower/East/Lift 5 Internal Stiffeners

The attached Non-Conformance Report describes an occurrence where the contractor did not comply with a requirement of the contract document as indicated below:

- Material or Workmanship not in conformance with contract documents.
- Quality Control (QC) not performed in conformance with contract documents.
- Recurring QC issue that constitutes a systematic problem in quality control.
- Non-Conformance Resolved.

Material Location: Tower Lift: 05

Remarks:

Caltrans Quality Assurance (QA) Inspector observed ZPMC personnel performing Shielded Metal Arc tack Welding (SMAW) of weld joint ESD1-TL5-2E/F-26B, 65mm to 70mm grillage internal stiffeners located inside East Tower, Lift 5, approximately 300mm from bottom of Lift 5, without sufficient base material preheat as follows:

- Multiple 160°C Tempilstik temperature indicator marks applied by this QA Inspector to the adjacent base material within approximately 40mm from the point of welding did not melt.
- East Tower, Lift 5, is designated as A709M, HPS 485W-T2. WPS-B-T-3213-TC-U5b requires the minimum preheat and interpass temperature to be 160°C for material thickness more than 60mm.

References:

AWS D1.5 (2002), Section 4.2.7 requires the base metal material to be at or above the specified minimum temperature for a distance not less than 75mm in all directions from the point of welding.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance item and document that the deficiency has been brought into compliance with contract requirements. Also propose a resolution that addresses the apparent failure of Quality Control to identify the non-conformance with the appropriate Welding Procedure Specification (WPS). Provide documentation of the steps taken by the Quality Control Manager to prevent future occurrences.

The response for the resolution of this issue is requested within 7 days.

Transmitted by: Gina Rizzardo Transportation Engineer
 Attachments: ZPMC-0751

02.02.15.04
 05.03.06-000748,NCT

Received
 NCT-000748 12 Jul 10 Page 1 of 2

NCT

(Continued Page 2 of 2)

cc: Rick Morrow, Gary Pursell, Mark Woods

File: 05.03.06

DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING 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
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.25B

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Changxing Island, Shanghai, PR China

Report No: NCR-000789

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 06-Jul-2010

Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

NCR #: ZPMC-0751

Type of problem:

- Welding Concrete Other
- Welding Curing Procedural
- Joint fit-up Coating Other
- Procedural Procedural Description:

Bridge No: 34-0006

Component: Grillage Internal Stiffeners, Lift 5, East Tower

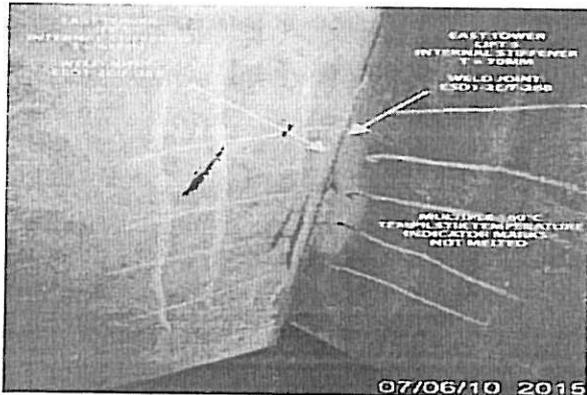
Reference Description: Insufficient Preheat for Welding

Description of Non-Conformance:

Caltrans Quality Assurance (QA) Inspector observed ZPMC personnel performing Shielded Metal Arc tack Welding (SMAW) of weld joint ESD1-TL5-2E/F-26B, 65mm to 70mm grillage internal stiffeners located inside East Tower, Lift 5, approximately 300mm from bottom of Lift 5, without sufficient base material preheat as follows:

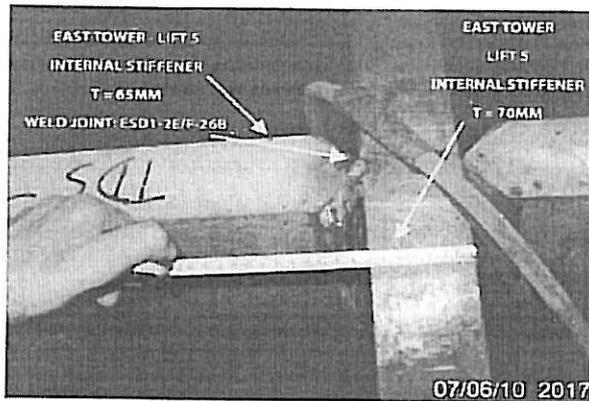
- Multiple 160°C Tempilstik temperature indicator marks applied by this QA Inspector to the adjacent base material within approximately 40mm from the point of welding did not melt.
- East Tower, Lift 5, is designated as A709M, HPS 485W-T2. WPS-B-T-3213-TC-U5b requires the minimum preheat and interpass temperature to be 160°C for material thickness more than 60mm.

Refer to photos below for additional information.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



Applicable reference:

AWS D1.5 (2002), Section 4.2.7 requires the base metal material to be at or above the specified minimum temperature for a distance not less than 75mm in all directions from the point of welding.

Who discovered the problem: George Goulet

Name of individual from Contractor notified: Cui Zhenghua

Time and method of notification: 2050 hours/ Verbal

Name of Caltrans Engineer notified: Jim Reid

Time and method of notification: 1430Hrs/ Verbal

QC Inspector's Name: Xu Jie, Liu Yang

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

N/A

Comments:

This report is for the purpose of determining 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 , who represents the Office of Structural Materials for your project.

Inspected By: Ng,Michael

QA Inspector

Reviewed By: Devey,Jim

SMR



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-3251 DATE 2010.09.26 PAGE 1 OF 3 Revision No: 0

PROJECT NO.: 工程编号 ZP06-787 CONTRACTOR: CALTRANS

ITEMS NAME: TOWER(E) FIFTH LITING FLOOR BEAM DRAWING NO.: ESD1-TL5-2F/F CALTRANS CONTRACT NO.: 04-0120F4
 部件名称 图号 加州工程编号

REFERENCING CODE 参考规范 ACCEPTANCE STANDARD 接受标准 PROCEDURE NO. 程序编号
 AWS D1.5-2002 AWS D1.5-2002(Table 6.3) ZPQC-UT-01

WELDING PROCESS 焊接方法 JOINT TYPE 焊缝类型 CALIBRATION DUE DATE 仪器校正有效期
 SMAW T-JOINT Dec. 28ST, 2010

EQUIPMENT 设备 MANUFACTURER 制造商 MODEL NO. 样式编号 SERIAL NO. 序列编号
 UT SCOPE PANAMETRICS EPOCH-4B 071565311,

CALIBRATION BLOCK 试块 COUPLANT 耦合剂 MATERIAL/THICKNESS 材料厚度
 AWS IIV BLOCK TYPE II C.M.C A709M-HPS-485WT2-Z 70/65/90mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70°	2.5MHz	18×18mm	Changchao	70°	2.5MHz	18×18mm
Changchao	0°	2.5MHz	20mm				

Reference Level 参考灵敏度 20dB

Base metal inspected per AWS D1.5-2002 Section 6.19.5 0° UT OK.

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注	
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)							
									a	b	c	d	Length 长度			Sound Path 声程
ESD1-TL5-2F/F-7A/B		70				40									ACC.	100%
		45				36									ACC.	100%
		0				13									ACC.	100%
ESD1-TL5-2F/F-8A/B		70				40									ACC.	100%
	1	45	A	2	46	36	10	0	20	150	25	-20	530	REJ.	100%	
	2	45	B	1	42	36	5	+1	20	91	64	-35	340	REJ.	100%	
		0				13								ACC.	100%	
ESD1-TL5-2F/F-1A/B	1	70	B	1	46	40	6	0	40	100	32	0	20	REJ.	100%	

EXAMINED BY 主探 Xu Rong gang
 LEVEL - II SIGN / DATE 2010.09.26

REVIEWED BY 审核 Xu Rong gang
 LEVEL - II SIGN / DATE 2010.09.26

质量经理 / QCM Wu Jianhua
 签字 SIGN / 日期 DATE 2010.09.26

用户 CUSTOMER
 签字 SIGN / 日期 DATE



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-3251

DATE 2010.09.26

PAGE 2 OF 3

Revision No: 0

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注	
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)							
					a	b	c	d	Length 长度	Sound Path 声程	Depth from Surface 距表面深度	From X 距X	From Y 距Y			
		45				36									ACC.	100%
		0				13									ACC.	100%
ESD1-TL5-2F/F-2A/B		70				40									ACC.	100%
		45				36									ACC.	100%
		0				13									ACC.	100%
ESD1-TL5-2E/F-20A/B	1	70	B	1	48	40	7	+2	30	115	36	-25	720	REJ.	100%	
	2	70	B	1	49	40	7	+2	30	115	35	-25	550	REJ.	100%	
	3	45	B	2	47	36	10	+1	100	155	21	-5	0	REJ.	100%	
	4	45	A	1	44	36	4	+4	110	76	54	-20	0	REJ.	100%	
		0				13									ACC.	100%
ESD1-TL5-2E/F-8A/B		70				40									ACC.	100%
	1	45	A	2	50	36	10	+4	110	145	28	-10	70	REJ.	100%	
	2	45	B	1	44	36	4	+4	110	70	50	-10	60	REJ.	100%	
	3	45	B	1	44	36	4	+4	40	69	47	-10	360	REJ.	100%	
		0				13									ACC.	100%
ESD1-TL5-2E/F-7A/B	1	70	A	1	48	40	8	0	60	130	43	-20	620	REJ.	100%	
	2	45	A	1	43	36	3	+4	20	62	44	-25	0	REJ.	100%	
	3	45	B	2	48	36	9	+3	15	143	29	-20	0	REJ.	100%	
	4	45	B	2	46	36	8	+2	30	120	46	-5	140	REJ.	100%	
	5	45	B	2	50	36	9	+5	20	143	29	-10	180	REJ.	100%	
		0				13									ACC.	100%

 EXAMINED BY 主探
Dai Geng sheng
 LEVEL - II SIGN / DATE 2010.09.26

 REVIEWED BY 审核
Xu Reng gang
 LEVEL - II SIGN / DATE 2010.09.26

 质量经理 / QCM
Wang Jianhua
 签字 SIGN / 日期 DATE 2010.09.26

 用户 CUSTOMER
 签字 SIGN / 日期 DATE



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-3251

DATE 2010.09.26

PAGE 3 OF 3

Revision No: 0

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)						
									a	b	c	d	Length 长度		
ESD1-TL5-2E/F-21A/B	1	70	A	1	48	40	6	+2	20	105	35	-20	760	REJ.	100%
	2	45	A	1	42	36	3	+3	30	63	44	-10	120	REJ.	100%
		0				13								ACC.	100%
ESD1-TL5-2E/F-1A/B		70				40								ACC.	100%
	1	45	B	2	51	36	10	+5	20	155	21	0	100	REJ.	100%
	2	45	B	2	49	36	8	+5	40	126	41	-20	250	REJ.	100%
	3	45	B	2	49	36	8	+5	50	126	41	-20	400	REJ.	100%
	4	45	B	2	52	36	10	+6	30	155	21	-5	700	REJ.	100%
		0				13								ACC.	100%
ESD1-TL5-2E/F-2A/B		70				40								ACC.	100%
		45				36								ACC.	100%
		0				13								ACC.	100%
ESD1-TL5-2E/F-17A/B		70				40								ACC.	100%
		45				36								ACC.	100%
		0				13								ACC.	100%
ESD1-TL5-2E/F-26A/B		70				40								ACC.	100%
		45				36								ACC.	100%
		0				13								ACC.	100%
ESD1-TL5-2B/F-13		70				40								ACC.	100%
		45				36								ACC.	100%
		0				13								ACC.	100%

EXAMINED BY主探

Dei Geng sheng

LEVEL - II SIGN / DATE 2010.09.26

REVIEWED BY 审核

Dei Geng sheng

LEVEL - II SIGN / DATE 2010.09.26

质量经理 / QCM

Lu Jian-hua

签字 SIGN / 日期 DATE

2010.09.26

用户CUSTOMER

签字 SIGN / 日期 DATE

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING 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
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: xx.25A**QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION****Location:** Changxing Island, Shanghai, PR China**Report No:** NCS-000786**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 14-Oct-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0751**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component:
Procedural	Procedural	Description:	

Date the Non-Conformance Report was written: 06-Jul-2010**Description of Non-Conformance:**

Caltrans Quality Assurance (QA) Inspector observed ZPMC personnel performing Shielded Metal Arc tack Welding (SMAW) of weld joint ESD1-TL5-2E/F-26B, 65mm to 70mm grillage internal stiffeners located inside East Tower, Lift 5, approximately 300mm from bottom of Lift 5, without sufficient base material preheat as follows:

- Multiple 160°C Tempilstik temperature indicator marks applied by this QA Inspector to the adjacent base material within approximately 40mm from the point of welding did not melt.
- East Tower, Lift 5, is designated as A709M, HPS 485W-T2. WPS-B-T-3213-TC-U5b requires the minimum preheat and interpass temperature to be 160°C for material thickness more than 60mm.

Contractor's proposal to correct the problem:

Contractor to provide NDT report to show areas with insufficient preheat are acceptable as well as issuing an internal NCR to prevent this occurrence from happening in the future. If incidents persist, Contractor will provide a formal documented training.

Corrective action taken:

ZPMC submitted a NDT report to show that the weld is acceptable, and ZPMC issued an internal NCR for personnel involved in the incident.

Did corrective action require Engineer's approval? Yes No**If so, name of Engineer providing approval:** **Date:****Is Engineer's approval attached?** Yes No**Comments:**

This report is for the purpose of determining 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 , who represents the Office of Structural Materials for your project.

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Inspected By: Ng,Michael

Quality Assurance Inspector

Reviewed By: Devey,Jim

QA Reviewer