

**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, P.R. China**Report No:** NCR-000382**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 10-Aug-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0356**Type of problem:**

<b>Welding</b>	<b>Concrete</b>	<b>Other</b>	<b>Bridge No:</b> 34-0006 <b>Component:</b> OBG SEG 4BW Bottom Plate
<b>Welding</b>	<b>Curing</b>	<b>Procedural</b>	
<b>Joint fit-up</b>	<b>Coating</b>	<b>Other</b>	
<b>Procedural</b>	<b>Procedural</b>	<b>Description:</b>	

**Reference Description:** Improper handling and support on welded base panel**Description of Non-Conformance:**

Caltrans Quality Assurance Inspector (QA) observed that the contractor has neglected to keep the fillet welded joint of the internal intermediate diaphragm with SPCM Cross Beam bottom plate (BP-25A) in close contact to prevent distortion or bending on OBG Segment 4BW. The maximum deflection at the end of the plate measured 600mm over a distance of 8880mm. The plate has been in this position and condition for at least 36 hours.

**Applicable reference:**

1. Standard Specifications Section 55-3.05 "Surfaces of bearing and base plates and other metal surfaces that are to come in contact with each other or with ground concrete surfaces or with asbestos sheet packing shall be flat to within one millimeter tolerance in 305 mm and to within 2 mm tolerance overall. Surfaces of bearing and base plates and other metal bearing surfaces that are to come into contact with preformed fabric pads, elastomeric bearing pads or Portland cement mortar shall be flat to within 3 mm tolerance in 305 mm and to within 5 mm overall. Steel slabs where not in contact with other metal bearing surfaces may be heat straightened in lieu of machining at the option of the Contractor, provided the above tolerances are met.

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 2 of 2 )

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2. Standard Specifications Section 55-3.09 "Finished members shall be true to line and free from twists, bends and open joints.

**Who discovered the problem:** Eric Tsang, Michael Foerder

**Name of individual from Contractor notified:** Larry Luo

**Time and method of notification:** 0915 hours, verbal

**Name of Caltrans Engineer notified:** Ching Chao

**Time and method of notification:** 1200 hours, verbal

**QC Inspector's Name:** Shen Xue Jun

**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 Mazen Wahbeh, +(86) 134.7247.7571, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Tsang, Eric	SMR
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<b>Reviewed By:</b>	Wahbeh, Mazen	SMR
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**DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge**

333 Burma Road  
Oakland CA 94607  
Tel: Fax:

**NON-CONFORMANCE REPORT TRANSMITTAL**

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

**Date:** 19-Aug-2009

**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:** 05.03.06-000346

**Subject:** NCR No. ZPMC-0356

**Reference Description:** Improper handling and support on welded base panel

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:** Xbeam **Lift:** 04

**Remarks:**

Caltrans Quality Assurance Inspector (QA) observed that the contractor has neglected to keep the fillet welded joint of the internal intermediate diaphragm with SPCM Cross Beam bottom plate (BP-25A) in close contact to prevent distortion or bending on OBG Segment 4BW. The maximum deflection at the end of the plate measured 600mm over a distance of 8880mm. The plate has been in this position and condition for at least 36 hours.

**Action Required and/or Action Taken:**

Submit repair plan to engineer for approval.

**Transmitted by:** Bill Howe

**Attachments:** ZPMC-0356

**cc:** Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Doug Coe, Jason Tom, Contract Files, Ching Chao

**File:** 05.03.06

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000346

**Subject:** NCR No. ZPMC-0356

**Dated:** 27-Aug-2009

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000350 Rev: 00

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**Contractor's Proposed Resolution:**

**Reference Resolution:** ZPMC QA has notified their production department to adjust storage areas as necessary. As for the X-Beam plate, ZPMC will adjust the supporting practices and re-MT the affected welds.

The ABF QCM walked the job site pointing out poor handling and storage practices based on information from ABF inspectors and CT personnel. ZPMC QA has notified their production department to adjust storage areas as necessary. As for the X-Beam plate, ZPMC will adjust the supporting practices and re-MT the affected welds. Documentation of these actions will be submitted at a later date to close this NCR.

**Submitted by:**

**Attachment(s):** ABF-NPR-000350R00

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**Caltrans' comments:**

**Status:** AAP

**Date:** 31-Aug-2009

The response is acceptable, but the Non-Conformance is not closed.

Please provide documentation that any affected welds are acceptable. The Department will review the Contractor's proposal to close Non-Conformance ZPMC-0356 at that time.

**Submitted by:** Wright, Doug

**Date:** 31-Aug-2009

**Attachment(s):**

## NCR PROPOSED RESOLUTION

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

**Dated:** 13-Nov-2009

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

**Attention:** Pursell, Gary  
Resident Engineer

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000350 Rev: 01

**Ref:** 05.03.06-000346

**Subject:** NCR No. ZPMC-0356

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### Contractor's Proposed Resolution:

**Reference Resolution:** ZPMC has completed NDT of the welds affected by this NCR and found them acceptable. ZPMC requests closure of this NCR.

ZPMC has completed NDT of the welds affected by this NCR and found them acceptable. ZPMC requests closure of this NCR.

**Submitted by:**

**Attachment(s):** ABF-NPR-000350R01;

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**Caltrans' comments:**

**Status:** CLO

**Date:** 30-Nov-2009

The documentation submitted has been reviewed by the Engineer and is considered sufficient to close the NCR.

**Submitted by:** Chao, Ching

**Date:** 30-Nov-2009

**Attachment(s):**



No. B-471

## LETTER OF RESPONSE

**TO: American Bridge/Flour**

**DATE: 2009-9-14**

**REGARDING: NCR-000382 (ZPMC-0356)**

With this letter of response, ZPMC requests closure for Caltrans NCR-000382 (ZPMC-0356). We agree what describe in the non-conformance report, the fabrication forman hade set one wood support below the bottom plate, but the distance between the support and BP is more bigger than the allowance, since each component of the FL3 bottom plate will be taken apart to make cleaning in the gap of the flange, we should also make a safe support to confirm there is no any damage to the base metal especially the connected area where fixed together by weld.

By the way we have do the MT inspection to the areas which point out by caltrans inspector, all of the process was witnessed by supervisor and the same question in the punchlist has been close out per the agreement by each parties.

so base on the above explanation, ZPMC applies to close the caltrans's report NCR-000382 (ZPMC-0356).

Please reference attached document for acceptance and closure the NCR-000382 (ZPMC-0356).

**ATTACHMENT:**

NCR-000382 (ZPMC-0356)

ZPMC internal NCR

The acceptable VT/MT reports.

*Wang Shuangbin*

*2009. 9. 14*



# Nonconformance Report

## 不符合项报告

Project Name: S.F.O.B.B  
 项目名称: 美国加州海湾大桥

NCR Number: NCR-B-245  
 NCR 编号: (ZPMC-0356)

Item: Improper handling and support on welded base panel  
 Item Number: 件号: N/A

名称描述: 不恰当的处理和支撑已焊好的母材  
 Drawing: 图号: BP25

Location: 总拼后场  
 位置:

Date: 日期: 2009-08-26

### Description of Nonconformance:

不符合项状态描述: 15001734228 -  
 Caltrans Quality Assurance inspector observed that the contractor has neglected to keep the filled welded joint of the internal intermediate diaphragm with SPCM Cross Beam bottom plate (BP25A) in close contact to prevent distortion or bending on OBG Segment 4BW. The maximum deflection at the end of the plate measured 600mm over a distance of 8880mm. The plate has been in this position and condition for at least 36 hours.

加州检验员发现 ZPMC 将 4BW FL3 联系梁侧的大底板 BP25A 荡下, 未能采取措施防止板变形。最里挡出的 8880MM 范围内有 600MM 的变形量, 此板处于这种状态超过 36 小时。

Work By: 施工方: Xia Fu Ling 8.24  
 Prepared by: 准备: [Signature] 8.26  
 Reviewed by QCE: 质量工程师批准: Zhao Shuangbao

- Drawing Error 图纸错误  
 Material Defect 材料缺陷  
 Fabrication Error 制作错误  
 Other 其他原因

Disposition:  Use as is 回用  
 Repair 返修  
 Reject 拒收

### Recommendation:

建议:

Prepared by: 准备  
 Approved by QCA: 质量经理批准

### Reason for Nonconformance:

不符合原因: 由于 4BW 联系梁大底板 BP25A 荡下清理杂物, 未采取措施防止板变形。  
 Didn't prevent distortion during 4BW internal intermediate diaphragm (BP25A) clean rubbish.

### Prevention Measures:

加强现场监督和检查。  
 Enhance supervision and inspection on-site.

Technical Justification for Use-As-Is/Repair:  Attachment  Non-attachment  
 回用或返修的技术依据:

请加州检验员指出变形区域, 并对附件区域进行 MT 检测。无附件。  
 Caltrans Quality Assurance inspector point out the distortion area, please. Perform MT inspection to the distortion area.

Reviewed/批准: [Signature]

Verification:  Acceptable 可接受  
 Unacceptable 不可接受

Verified by QCI/质检确认: [Signature]  
 Reviewed by QCA/质检主任审核: [Signature]

2009.8.26  
 J.P. 10

Caltrans

DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge  
333 Burma Road  
Oakland CA 94607  
Tel. Fax:

### NON-CONFORMANCE REPORT TRANSMITTAL

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

Date: 19-Aug-2009

Contract No: 04-0120F4

04-SF-80-13.2 / 13.9

Job Name: SAS Superstructure

Document No: 05.03.06-000346

Dear: Mr. Charles Kanapicki  
Attention: Mr. Thomas Nilsson Project/Fabrication Manager  
Subject: NCR No. ZPMC-0356

Reference Description: Improper handling and support on welded base panel

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: Xbeam

Lift: 04

Remarks:

Caltrans Quality Assurance Inspector (QA) observed that the contractor has neglected to keep the lifter welded joint of the internal intermediate diaphragm with SPCM Cross Beam bottom plate (BP-25A) in close contact to prevent distortion or bending on OBG Segment 4BW. The maximum deflection at the end of the plate measured 600mm over a distance of 8880mm. The plate has been in this position and condition for at least 36 hours.

Action Required and/or Action Taken:

Submit repair plan to engineer for approval.

Transmitted by: Bill Howe

Attachments: ZPMC-0356

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Doug Coe, Jason Tom, Contract Files, Ching Chao  
File: 05.03.06

05.03.06-000346.NCT

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  
 City: SF/ALA Rte: 80 PM. 13.2/13.9  
 File #: 69.25B

**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT**

Location: Changxing Island, Shanghai, P.R. China

Report No: NCR-000382

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 10-Aug-2009

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

NCR #: ZPMC-0356

Type of problem:

- |              |                                     |            |                          |              |                          |
|--------------|-------------------------------------|------------|--------------------------|--------------|--------------------------|
| Welding      | <input checked="" type="checkbox"/> | Concrete   | <input type="checkbox"/> | Other        | <input type="checkbox"/> |
| Welding      | <input type="checkbox"/>            | Curing     | <input type="checkbox"/> | Procedural   | <input type="checkbox"/> |
| Joint fit-up | <input type="checkbox"/>            | Coating    | <input type="checkbox"/> | Other        | <input type="checkbox"/> |
| Procedural   | <input checked="" type="checkbox"/> | Procedural | <input type="checkbox"/> | Description: |                          |

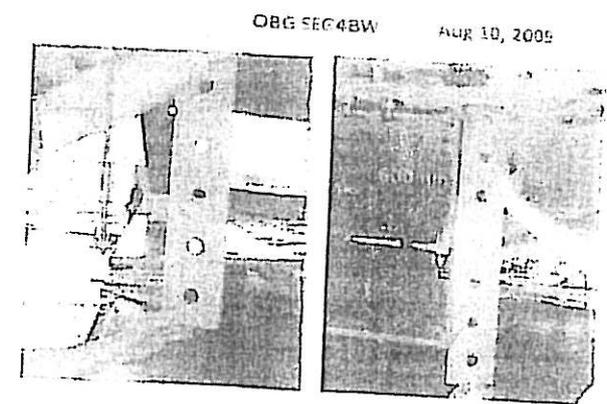
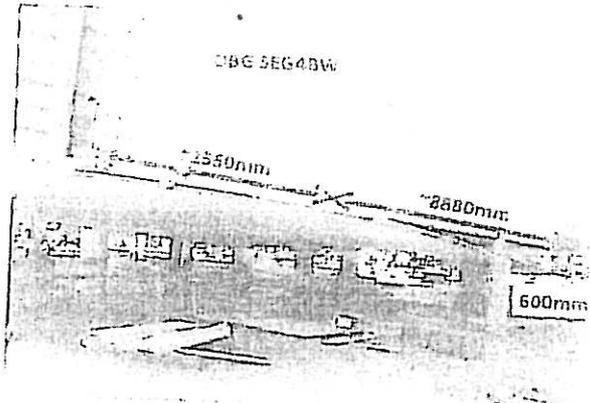
Bridge No: 34-0006

Component: OBG SEG 4BW Bottom Plate

Reference Description: Improper handling and support on welded base panel

Description of Non-Conformance:

Caltrans Quality Assurance Inspector (QA) observed that the contractor has neglected to keep the fillet welded joint of the internal intermediate diaphragm with SPCM Cross Beam bottom plate (BP-25A) in close contact to prevent distortion or bending on OBG Segment 4BW. The maximum deflection at the end of the plate measured 600mm over a distance of 8880mm. The plate has been in this position and condition for at least 36 hours.



Applicable reference:

- Standard Specifications Section 55-3.05 "Surfaces of bearing and base plates and other metal surfaces that are to come in contact with each other or with ground concrete surfaces or with asbestos sheet packing shall be flat to within one millimeter tolerance in 305 mm and to within 2 mm tolerance overall. Surfaces of bearing and base plates and other metal bearing surfaces that are to come into contact with preformed fabric pads, elastomeric bearing pads or Portland cement mortar shall be flat to within 3 mm tolerance in 305 mm and to within 5 mm overall. Steel slabs where not in contact with other metal bearing surfaces may be heat straightened in lieu of machining at the option of the Contractor, provided the above tolerances are met.

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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2 Standard Specifications Section 55-3.09 "Finished members shall be true to line and free from twists, bends and open joints.

Who discovered the problem: Eric Tsang, Michael Foerder

Name of individual from Contractor notified: Larry Luo

Time and method of notification: 09:15 hours, verbal

Name of Caltrans Engineer notified: Ching Chao

Time and method of notification: 1200 hours, verbal

QC Inspector's Name: Shen Xue Jun

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 Mazen Wahbeh, +(86) 134.7247.7571, who represents the Office of Structural Materials for your project.

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Inspected By: Tsang, Eric

SMR

Reviewed By: Wahbeh, Mazen

SMR

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周数 96

日期 2009.09.04

**Visual Weld Inspection Report**  
焊缝目视检查报告

Girder/ 梁: OBG Plate Panel Splice

Tower/ 塔:

Quality Control Representative:  
质检代表:

Caltrans Contract No. 04-0120F4  
加州合同编号

Project No.: 项目  
名称 San Francisco Oakland Bay Bridge 美  
国海湾大桥

CWI:  
质检员: *Gu rong zhan*  
*0720671*

Project No.: 项目  
编号: ZP06-787

Quality Assurance Manager ~Approval  
质量控制经理:

Weld No. 焊缝编号	Welder I.D.# 焊工识别号	Location 位置	Welding consumables 焊接材料	Undercut 咬边	Porosity 气孔	Over lap 焊瘤	Crater 弧坑	Arc strike 电弧擦伤	Spatters 飞溅	Crack 裂纹	Accept or Reject 接受或拒收	Repair 返修	Accept or Reject after repair 返修后接受或拒收
SSD25-PP27-043	220069	3F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-044	220069	3F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-049	220069	3F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-050	220069	3F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-051	220069	3F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-052	220069	3F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-055	220069	3F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-056	220069	3F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-059	220069	3F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-060	220069	3F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA

After root weld

After cover pass

After CWR or WRR No.:

After HSR No.:

Others: NCR-B-245

#R787-QCP-603

" / " is no defects " Y " is defects " N/A " is not applicable



周数 96

日期 2009.09.04

**Visual Weld Inspection Report**  
焊缝目视检查报告

**Girder/ 梁:** OBG Plate Panel Splice

**Tower/ 塔:**

Caltrans Contract No.

加州合同编号

04-0120F4

Quality Control Representative:

质检代表:

Project No.:

名称

San Francisco Oakland Bay Bridge

旧金山海湾大桥

guorong jian  
012067

Project No.:

编号:

ZP06-787

Quality Assurance Manager - Approval

质量控制经理:

Weld No. 焊缝编号	Welder I.D.# 焊工识别号	Location 位置	Welding consumables 焊接材料	Undercut 咬边	Porosity 气孔	Over lap 焊瘤	Crater 弧坑	Arc strike 电弧擦伤	Spatters 飞溅	Crack 裂纹	Accept or Reject 接受或拒收	Repair 返修	Accept or Reject after repair 返修后接受或拒收
SSD25-PP27-063	220069	3F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-064	220069	3F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-067	220069	3F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-068	220069	3F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-111	220069	3F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-112	220069	3F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-119	220069	3F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-120	220069	3F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-121	220069	3F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-122	220069	3F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA

After root weld

After cover pass

After CWR or WRR No.:

After HSR No.:

Others: NCR-B-245

#R787-QCP-603



**Visual Weld Inspection Report**  
焊缝目视检查报告

Caltrans Contract No. 加州合同编号	04-0120F4	Girder/梁:	OBG Plate Panel Splice	周数	96
Project No.: 名称	San Francisco Oakland Bay Bridge 旧金山海湾大桥	Tower/塔:		日期	2009.09.04
Project No.: 编号:	ZP06-787	Quality Control Representative: 质检代表:			
		CWI: 检验员:	Gu Jinyang 0720677		
		Quality Assurance Manager ~Approval 质量控制经理:			

Weld No. 焊缝编号	Weider I.D.# 焊工识别号	Location 位置	Welding consumables 焊接材料	Undercut 咬边	Porosity 气孔	Over lap 焊瘤	Crater 弧坑	Arc strike 电弧擦伤	Spatters 飞溅	Crack 裂纹	Accept or Reject 接受或拒收	Repair 返修	Accept or Reject after repair 返修后接受或拒收
SSD25-PP27-125	220069	2F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-126	220069	2F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-129	220069	2F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-130	220069	2F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-133	220069	2F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-134	220069	2F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-135	220069	2F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-136	220069	2F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-143	220069	2F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-144	220069	2F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA

After root weld

After CWR or WRR No.:

After cover pass

After HSR No.:

Others: NCR-B-245

#R787-QCP-603

"√" is no defects "X" is defects "NA" is not applicable



**Visual Weld Inspection Report**  
**焊缝目视检查报告**

Caltrans Contract No. 加州合同编号		04-0120F4		Girder/ 梁:		OBG Plate Panel Splice		周数	96				
Project No.: 项目名称		San Francisco Oakland Bay Bridge 旧金山海湾大桥		Tower/ 塔:				日期	2009.09.04				
Project No.: 项目编号		ZP06-787		Quality Control Representative: 质检代表:									
				CWI: 检验员:		gu rong jian		07120671					
				Quality Assurance Manager ~Approval 质量控制经理:									
Weld No. 焊缝编号	Welder I.D.# 焊工识别号	Location 位置	Welding consumables 焊接材料	Undercut 咬边	Porosity 气孔	Over lap 焊瘤	Crater 弧坑	Arc strike 电弧擦伤	Splatters 飞溅	Crack 裂纹	Accept or Reject 接受或拒收	Repair 返修	Accept or Reject after repair 返修后接受或拒收
SSD25-PP27-039	220069	2F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-040	220069	2F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-183	220069	2F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
SSD25-PP27-184	220069	2F	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
<input type="checkbox"/> After root weld <input type="checkbox"/> After cover pass <input type="checkbox"/> After CWR or WRR No. : <input checked="" type="checkbox"/> Others: NCR-B-245													

#R787-QCP-603

"√" is no defects. "X" is defects. "NA" is not applicable.



# REPORT OF MAGNETIC PARTICLE EXAMINATION

## 磁粉检测报告

REPORT NO. 报告编号 B787-MT-13694      DATE日期 2009.09.10      PAGE OF页码 1/3      Revision No: 0

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

DRAWING NO. 图号: OBW4      CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4

REFERENCING CODE 参考规范编码: AWS D1.5-2002      ACCEPTANCE STANDARD 接受标准: AWS D1.5-2002      PROCEDURE NO. 程序编号: ZPQC-MT-01      CALIBRATION DUE DATE 仪器校正有效期: Dec. 28<sup>ST</sup>, 2009

EQUIPMENT 设备: MT YOKE      MANUFACTURER 制造商: PARKER      MODEL NO. 样式编号: B310S      SERIAL NO. 连续编号: 5395 5617 5620

MAGNETIZING METHOD 磁化方法: Continuous magnetic yoke 磁轭式连续法      CURRENT 电流: AC

PARTICLE TYPE 磁粉类型: Dry magnet powder 干磁粉      YOKE SPACING 磁轭间距: 70~150mm

MATERIAL TO BE EXAMINED 检测材料:  WELDING 焊接件      Material & thickness 母材, 厚度: A709M-345  
 CASTING 铸件      12/14mm  
 FORGING 锻造

WELDING PROCESS 焊接方法: FCAW      TYPE OF JOINT 焊缝类型: CORNER JOINT

WELD I.D. 焊缝编号	DISCONTINUITY不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
SSD25-PP27-043				ACC.		100%MT
SSD25-PP27-044				ACC.		100%MT
SSD25-PP27-049				ACC.		100%MT
SSD25-PP27-050				ACC.		100%MT
SSD25-PP27-051				ACC.		100%MT
SSD25-PP27-052				ACC.		100%MT
SSD25-PP27-055				ACC.		100%MT
SSD25-PP27-056				ACC.		100%MT
SSD25-PP27-059				ACC.		100%MT
SSD25-PP27-060				ACC.		100%MT
SSD25-PP27-063				ACC.		100%MT
SSD25-PP27-064				ACC.		100%MT
SSD25-PP27-067				ACC.		100%MT
SSD25-PP27-068				ACC.		100%MT

EXAMINED BY主探: Jin Jianting *Jin Jianting*      REVIEWED BY 审核: *Su Wei*  
 LEVEL - II SIGN 签名 / DATE日期: *9.09.10*      LEVEL-II SIGN / DATE日期: *9.09.10*  
 质量经理 / QCM: \_\_\_\_\_      用户CUSTOMER: \_\_\_\_\_  
 签字 SIGN / 日期 DATE: \_\_\_\_\_      签字 SIGN / 日期 DATE: \_\_\_\_\_





# REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-13694

DATE日期 2009.09.10

PAGE OF页码 3/3

Revision No: 0

PROJECT NO.

ZP06-787

CONTRACTOR:

CALTRANS

工程编号:

用户:

DRAWING NO.

OBW4

CALTRANS CONTRACT NO.:

图号:

OBG PLATE PANEL SPLICE

加州工程编号

04-0120F4

REFERENCING CODE

ACCEPTANCE STANDARD

PROCEDURE NO.

CALIBRATION DUE DATE

参考规范编码

接受标准

程序编号

仪器校正有效期

AWS D1.5-2002

AWS D1.5-2002

ZPQC-MT-01

Dec. 28<sup>ST</sup>, 2009

EQUIPMENT 设备

MANUFACTURER 制造商

MODEL NO. 样式编号

SERIAL NO. 连续编号

MT YOKE

PARKER

B310S

5395 5617 5620

MAGNETIZING METHOD

Continuous magnetic yoke

CURRENT

AC

磁化方法

磁轭式连续法

电流

PARTICLE TYPE

Dry magnet powder

YOKE SPACING

70~150mm

磁粉类型

干磁粉

磁轭间距

MATERIAL TO BE

WELDING 焊接件

Material & thickness

A709M-345

EXAMINED

CASTING 铸件

母材,厚度

12/14mm

检测材料

FORGING 锻造

WELDING PROCESS

FCAW

TYPE OF JOINT

CORNER JOINT

焊接方法

焊缝类型

WELD I.D.

焊缝编号

DISCONTINUITY不连续性

INDICATION

指示

TYPE

类型

LENGTH IN mm

长度

ACCEPT

接受

REJECT

拒收

REMARKS

备注

SSD25-PP27-143

ACC.

100%MT

SSD25-PP27-144

ACC.

100%MT

SSD25-PP27-039

ACC.

100%MT

SSD25-PP27-040

ACC.

100%MT

SSD25-PP27-183

ACC.

100%MT

SSD25-PP27-184

ACC.

100%MT

BLANK

EXAMINED BY 主探

Jin Jianting *Jin Jianting*

REVIEWED BY 审核

*Su Wei*

LEVEL - II SIGN 签名 / DATE日期

LEVEL-II SIGN / DATE日期

质量经理 / QCM

用户CUSTOMER

签字 SIGN / 日期 DATE

签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

**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, P.R. China**Report No:** NCS-000412**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 25-Dec-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0356**Type of problem:**

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

**Date the Non-Conformance Report was written:** 10-Aug-2009**Description of Non-Conformance:**

Caltrans Quality Assurance Inspector (QA) observed that the contractor has neglected to keep the fillet welded joint of the internal intermediate diaphragm with SPCM Cross Beam bottom plate (BP-25A) in close contact to prevent distortion or bending on OBG Segment 4BW. The maximum deflection at the end of the plate measured 600mm over a distance of 8880mm. The plate has been in this position and condition for at least 36 hours.

**Contractor's proposal to correct the problem:**

The contractor has re-performed the NDT.

**Corrective action taken:**

The weld in question has been accepted with NDT documentation.

**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 Mazen Wahbeh, +(86) 134.7247.7571, who represents the Office of Structural Materials for your project.

**Inspected By:** Tsang, Eric **Quality Assurance Inspector****Reviewed By:** Wahbeh, Mazen **QA Reviewer**