

**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 #: 1x.28**WELDING INSPECTION REPORT**

**Resident Engineer:** Casey, William  
**Address:** 333 Burma Road  
**City:** Oakland, CA 94607

**Report No:** WIR-027497  
**Date Inspected:** 25-Apr-2012

**Project Name:** SAS Superstructure  
**Prime Contractor:** American Bridge/Fluor Enterprises, a JV  
**Contractor:** American Bridge/Fluor Enterprises, a JV

**OSM Arrival Time:** 700  
**OSM Departure Time:** 1530  
**Location:** On Site

**CWI Name:** Tony Sherwood  
**Inspected CWI report:** Yes No N/A  
**Electrode to specification:** Yes No N/A  
**Qualified Welders:** Yes No N/A  
**Approved Drawings:** Yes No N/A

**CWI Present:** Yes No  
**Rod Oven in Use:** Yes No N/A  
**Weld Procedures Followed:** Yes No N/A  
**Verified Joint Fit-up:** Yes No N/A  
**Approved WPS:** Yes No N/A  
**Delayed / Cancelled:** Yes No N/A

**Bridge No:** 34-0006**Component:** SAS OBG Components**Summary of Items Observed:**

This Quality Assurance (QA) Inspector, Art Peterson arrived on site between the times noted above. This QA Inspector was on site to randomly observe Quality Control (QC) personnel perform Non-Destructive Testing (NDT) and monitor the welding operations performed by American Bridge Fluor (ABF) welding personnel. The following observations were:

PP120 ~ PP124.7 Segment 13E Grid Line E2.0 ~ E2.8 Deck Plate Drop-in Sections:

This QA Inspector observed ABF Welder Rick Clayborn (Welder ID 2773) performing the fillet weld operation per the Shielded Metal Arc Welding (SMAW) process in the (2F) horizontal position attaching the blank nuts to the deck plate on Segment 13E for installation of the key plates to adjust the longitudinal weld splice planar offset between the Deck Plate section and Deck Plate Drop-in section at transverse field weld splice 13E/14E on PP121.6, longitudinal field weld splice along Grid E2.3 and Grid E2.4.

This QA Inspector observed QC Inspector Bernie Docena verify prior to the start of the fillet weld operation, that the minimum preheat temperature as per the approved WPS was established; and afterwards verified that the welding parameters (Amps and Travel Speed) were in accordance with WPS F1200A using E7018 (1/8") diameter electrode.

This QA Inspector observed that ABF welder Rick Clayborn was in-process fillet welding the blank nuts to the Deck Plate section and Deck Plate Drop-in section along Grid E2.1 at the end of this QA Inspectors' shift.

---

---

# WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

---

PP120 ~ PP124.7 Segment 13E Grid Line E2.1 ~ E2.8

This QA Inspector along with QC Inspector Tony Sherwood performed a joint inspection to measure the root gap of the complete-joint penetration (CJP) longitudinal and transverse single V butt-joint grooves between the Deck plate Section and the Deck plate Drop-in Sections.

The transverse single V butt joint grooves were on PP125, PP123.6, PP122.2, PP121.6, PP121.2, and PP120.6. The longitudinal single V butt-joint grooves were on Grid Lines E2.1, E2.2, E2.3, E2.4, E2.5, and E2.8. The measurements were recorded on a data sheet and will be submitted to Caltrans for approval for root openings that exceeded the Weld Procedure Specification (WPS) tolerances.

Punch List Item No. 280: General: Bike Path: Category: Outstanding: Location: BK005A-001

Description: The emergency gate track is not welded to emergency platform connection plate per Shop Drawing BKR-AN-5.

Reference: BKR-AN-5.

Status: Welding: complete / Paint: outstanding - Comment: The Contractor welded the piece mark numbers P-25 and P-26 as per the shop drawing which denoted a partial-joint penetration groove weld for the full length and were ground to fit the wheel. The Contractor has yet to perform the coating operation on the emergency gate tracks.



## Summary of Conversations:

Only general conversations between this QAI and QC on this date.

## 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 Nina Choy, 510-385-5910, who represents the Office of Structural Materials for your project.

---

---

# WELDING INSPECTION REPORT

*( Continued Page 3 of 3 )*

---

---

**Inspected By:** Peterson, Art

Quality Assurance Inspector

**Reviewed By:** Levell, Bill

QA Reviewer