

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-027151**Date Inspected:** 06-Feb-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Salvador Moreno**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector R. Hernandez was present during the time noted above and conducted observations relative to the work being performed.

The QA Inspector randomly observed the following work in progress:

Quality Assurance Inspector (QA) Rene Hernandez was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

West Line

Magnetic Particle Testing

This QA performed Magnetic Particle Testing (MT) on approximately 15% of welds at the following location and weld numbers: 13W/14W weld no. F1.

These welds were previously accepted by QC Magnetic Particle technicians in accordance with AWS D1.5-2002, section 6, table 6.3.

This QA observed no rejectable indications at the time of testing. This QA generated a TL-6028 MT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications.

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This weld is a Seismic Performance Critical Member (SPCM) member.

This QA observed, at random intervals, ABF/JV qualified welder Richard Garcia #3110-4 performing Flux Cored Arc Welding (FCAW) with .072" diameter NR232 electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-2160-1-1G. This was a Complete Joint Penetration (CJP) weld connecting 13W to 14W top deck plate CJP weld A4. This work was located at West line connection joint 13W to 14W.

During welding, ABF Quality Control (QC) Sal Moreno was noted monitoring the welding parameters. Welding parameters were recorded as (Voltage 23.2V / Amperage 266A).

## East Line

Conducted visual inspection of exposed deck surfaces between Lift 7E and 12E at PP47 through PP109. Between E3 and E6 lines were accessible. Walk was conducted with ABF QA personnel Steven Jensen. All areas were reviewed by both parties and both parties were mutually agreeable as to the location and repair areas as marked in the field and identified in the plan view drawings. The following were observations noted in the field and on the plan view drawings:

PP114.5 @ east line near E5 grounding lug for welders must be removed after use of grounding lug is complete.

PP113 to PP116 area were obstructed by conex boxes, visual examination required prior to final acceptance.

CB17 @ east line. Obstructed with dunnage and stairs, visual examination required prior to final acceptance.

PP108.5 @ E5 temporary welds need removal and NDT inspection prior to final acceptance.

PP106 @ E5 has arc strikes requiring repair and NDT inspection prior to final acceptance.

PP90 and 91 @ east line near E5.5 temporary attachment require removal and NDT inspection prior to final acceptance.

PP91.5 @ east line near E5 has arc strikes requiring repair and NDT inspection prior to final acceptance.

PP76 @ east line near E4 has arc strikes requiring repair and NDT inspection prior to final acceptance.

PP74 and 75 @ east line near #5.5 t temporary attachment require removal and NDT inspection prior to final acceptance.

PP76 @ east line near E3.5 decking has a dent between rib stiffeners. Dent is about 6-8" in diameter with the dent penetrating downward about a 1/4".

PP76 @ E3 requires repair and NDT inspection prior to final inspection.

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PP65 to PP 75 @ E4.5 to E6 obstructed with multiple kegs of high strength bolts, final inspection required prior to final inspection.

PP58.5 @ E4 arc strikes require repair and NDT inspection prior to final inspection.

PP60 to PP61 @ E2 line require temporary attachment removed and NDT inspection prior to final acceptance. All areas cover from Lift 7 to lift 12 eastbound side of bridge. Work is in progress and requires further inspection.

This QA verbally informed QA SPCM Lead, Daniel Reyes, of the issues noted in this report for compliance. For further details of issues of significance see QA SPCM Lead, Daniel Reyes, "Daily Inspection Report" (TL-6031) submitted for this date.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



## Summary of Conversations:

Pertinent conversations are in the body of this report

## 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, (858) 531-0335, who represents the Office of Structural Materials for your project.

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**Inspected By:** Hernandez,Rene

Quality Assurance Inspector

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**Reviewed By:** Levell,Bill

QA Reviewer