

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 #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-027543**Date Inspected:** 27-Apr-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** See Below**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/Tower**Summary of Items Observed:**

At the start of the shift this Quality Assurance Lead Inspector (QAI) traveled to the SAS project site and observed the work and the inspection performed by American Bridge/Fluor Enterprises (AB/F) Quality Control (QC) personnel. The observations and inspections were performed as noted below:

A). This Quality Assurance Lead Inspector (QALI) assigned the QA Inspectors to the following, but not limited to the work station(s) listed, to observe the welding and the QC inspection of the following:

Joselito Lizardo-Tower, 13 Meter El. (Observed the welding and QC inspection of stiffener plates and shear plate to diaphragm plate).

Doug Frey-OBG E12 (Observation of welding and QC inspection of longitudinal stiffeners), OBG W12 (Observation of welding, QC inspection and testing of a transverse stiffener and of a deck access hole) and QA/MPT & UT verification.

Craig Hager-Tower Base (Observation of welding, QC inspection and testing of bearing stiffener plates), ESW "F" (Excavation of UT reject) and welding of doubler plates to shear plates. (Note: see Summary of Conversations below)

Daniel Reyes-Skyway (Observation of welding and QC inspection of guard rail brackets at gate #2).

NOTE: See QA Daily Weld Inspection Reports (WIR) and NDE reports for additional information and details.

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Quality Assurance Lead Inspector (QALI) Summary

This QA Lead Inspector (QALI) observed the QA Inspector's Joselito Lizardo, Art Peterson, Craig Hager and Doug Frey monitor the work performed by the QC inspectors at random intervals and also observed the QA Inspectors verify the welding parameters, the minimum preheat and the maximum interpass temperatures for compliance with the contract specifications. The QAI's utilized a Fluke 337 clamp meter to measure the electrical welding parameters, Tempil Heat Indicators and/or a Fluke 63 IR Thermometer for verifying the preheat and interpass temperatures. At the conclusion of the shift, this QA Lead Inspector discussed and reviewed the work performed by the QAI's in regards to the various observations and the verifications of the WPS's, consumables, welding parameters, preheat and interpass temperatures. The QAI observations of the QC inspection and verification of the welding parameters performed on this date appeared to comply with the contract specifications and no issues were noted.

This QALI continued the daily review of field inspection reports and update of the field document control tracking records regarding the Orthotropic Box Girders (OBG, Longitudinal and Transverse "A" Deck Stiffeners, Deck Access Holes and the Tower Shear plates).

Skyway, East Bound Bike Path

This QAI observed the fit-up and fillet welding of the brackets to the top of the guard rail identified as Gate # 2. The welding was performed by welding personnel Jason Collins ID-8128 utilizing the Shielded Metal Arc Welding (SMAW) process as per the Welding Procedure Specification (WPS) ABF-WPS-D15-F1200A, Rev. 2. The WPS was also used by the Quality Control (QC) Inspector Steve Jensen as a reference when monitoring the welding and performing QC verification of the welding parameters. The average amperage was noted by Mr. Jensen as 95 amps. The QC inspector also monitored the preheat temperature during the field welding and which appeared to meet the minimum requirements. The work performed during this shift appeared to comply with the contract documents.

Later in the shift, this QALI was informed by Structural Materials Representative (SMR), Bahjat Dahger, that the contractor had been given the approval, by the Department, to proceed with the welding of the east drop-in panels at OBG E13, with the exception of the following weld joints: 13E-E2.2, 13E-PP123.6 and 13E-PP122.2. These areas have planar misalignment issues and will require further review.

Summary of Conversations:

There were general conversations with Quality Control Lead Inspector, Bonifacio Daquinag, Jr., at the start of the shift regarding the location of welding, inspection personnel scheduled for this shift.

This QALI was informed by QAI Craig Hager in regards to the excavation of the UT reject of the ESW identified as Joint "F". Mr. Hager's concern was that during the excavation it appeared that the characteristics of the defect should have warranted the use of a different UT technique. Later in the shift, this QALI informed Mr. Hager that the Project UT Level III and this QALI would review the UT procedure.

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

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remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Reyes,Danny	Quality Assurance Inspector
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Reviewed By:	Levell,Bill	QA Reviewer
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