

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 #: 1x.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013946**Date Inspected:** 03-May-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1000**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1830**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name:	William Sherwood and Bonifacio Quijano			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:	Orthotropic Box Girder		

Summary of Items Observed:

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At OBG L1E/L2E bottom plate 'D' outside, QA randomly observed ABF/JV qualified welder Mitch Sittinger perform CJP groove welding repair. The welder was observed welding in the 4G (overhead) position utilizing Shielded metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1000-Repairs. The weld repairs were excavated to a boat shape with one repair having a dimension of 85mm long X 30mm wide X 20mm deep. The repair excavations were preheated to more than 140 degree Fahrenheit using propane gas torch prior welding. During the shift, ABF QC William Sherwood was noted monitoring the welder. Prior welding, ABF QC William Sherwood was also observed performing Magnetic Particle Testing (MT) on the repair excavations. During the shift, the welder has completed one welding repair outside and was noted moving to another repair area to start excavation.

At OBG L3E/L4E side plate 'C' outside, ABF QC Barry Drake and William Sherwood were observed performing Magnetic Particle Testing (MT) on the splice butt joint backing bar removal and some part of the inside root/outside base metal. The QC was using Parker Contour Probe electromagnetic yoke with red magnetic powder as detecting media. The whole length (10555mm) of the side plate was tested and passed the MT except at the end corner of edge plate 'B' wherein the welder was still chasing slag inclusion from the inside weld. This QA also performed random MT on the same weld joint and revealed same result. While the weld joint backing bar removal is being MT'd, welders Rory Hogan and Jeremy Dolman were noted preparing their welding equipment in

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preparation for the 4G FCAW-G back welding.

All other ABF activities observed include flush grinding of weld cover reinforcement at OBG L3E/L4E side plate 'E' outside, grinding of excessive weld cover reinforcement at OBG L1E/L2E side plate 'E' inside and marking of excessive reinforcement, weld underfill and excessive undercut by ABF QC Bonifacio Daquinag at OBG L3E/L4E side plate 'E' inside.



Summary of Conversations:

As stated above.

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 SMR Mohammad Fatemi (916) 227-5298, who represents the Office of Structural Materials for your project.

Inspected By: Lizardo, Joselito

Quality Assurance Inspector

Reviewed By: Levell, Bill

QA Reviewer