

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013059**Date Inspected:** 16-Apr-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1100**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1930**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name:	Tom Pasqualone and Bonifacio Daquinag			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 L3E/L4E plate 'C2' (5355 to 7955mm) inside, QA randomly observed ABF/JV qualified welder Sungtao, Huang ID # 3794 and Mitch Sittinger ID #0315 continue perform CJP groove (splice) welding fill to cover pass. The welder was observed welding in the 3G (vertical) position utilizing an automatic dual shield Flux Cored Arc Welding (FCAW-G) with E71T-1M, 1/16" diameter wire electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-3042B-1. The joint being welded has a single V-groove butt joint with backing bar. The splice joint was preheated and maintained to greater than 200 degree Fahrenheit using Miller Proheat 35 Induction Heating System located at the other side of the plate prior welding. During welding, ABF Quality Control (QC) Tom Pasqualone was noted monitoring the welding parameters of the welder. QA performed parameter readings during welding with the following results; 250 amperes, 24.3 volts and 230mm per minute travel speed which are deemed acceptable to contract specifications. During the shift, welding of the weld cover on the area mentioned above was completed and welders were noted moving to the same plate but in higher elevation area.

At OBG L1E/L2E side plate 'C' inside, QA randomly observed ABF/JV qualified welder Rick Clayborn ID #2773 perform CJP groove welding repair. The welder was observed welding in the 3G (vertical) position utilizing Shielded metal Arc Welding (SMAW) with 1/8" and 5/32" diameter E7018H4R electrode. The plates were preheated to more than 140 degree Fahrenheit prior welding. During the shift, ABF QC Bonifacio Daquinag was

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

noted monitoring the welder and also noted performing Magnetic Particle Testing (MT) on the excavations prior welding. QC was using a Parker Contour electromagnetic yoke with red magnetic powder as detecting media. Before the end of the shift, the welder has completed welding repairs on five locations at this OBG.

Other ABF personnel activities noted during the shift include flush grinding of back weld reinforcement at OBG 2E/3E side plate 'C' outside and plasma arc gouging/removal of splice butt joint backing bar at OBG 2E/3E side plate 'E' outside. After finishing gouging, the welders were also noted grinding the gouged groove area. Both flush grinding of back weld reinforcement and grinding of the gouged area were still ongoing at the end of the shift.



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
