

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 #: 01.28**WELDING INSPECTION REPORT**

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

Report No: WIR-030108
Date Inspected: 05-Oct-2013

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:	Jesus Cayabyab & Salvador Merino			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:	See Below		

Summary of Items Observed:

Quality Assurance Inspector (QAI) Edward Leach was at the American Bridge/Flour (ABF) job site at Yerba Buena Island between the times noted above in order to monitor Smith Emery Quality Control (QC) functions and the in process work being performed by ABF personnel. The following items were observed:

Tower Skirt: Weld Access Holes

ABF welding personnel Gao Wu Chen was observed utilizing the Shielded Metal Arc Welding (SMAW) process in the vertical (3F) & horizontal (2F) positions with Atom Arc E7018-1 H4R, 1/8" diameter electrode to fillet weld one inch cover plates for weld access hole located at the west & south shaft, weld #160. The welding amperage was verified at 130 amps by QC Inspector Salvador Merino with a Fluke 337 current clamp meter per ABF Welding Procedure Specification (WPS) ABF-WPS-D15-F1200A, Revision 2. The work observed at these locations appeared to be progressing to the general requirements to the contract specifications.

ESW Repair Excavations

RWR201308-004

ESW N-042, Location "J" Face A

The QAI periodically observed ABF welding personnel Wai Kit Lai utilizing the Shielded Metal Arc Welding (SMAW) process in the vertical (3G) position with Atom Arc E7018-1 H4R, 1/8" diameter electrode to weld face J for one repair excavations on Electroslag Weld (ESW) weld "J" N-042. Locations are listed as detailed in Request for Weld Repair (RWR) 201308-004 from Ultrasonic Testing indications designated for repair. The repair locations & dimensions are noted as:

Y=3380mm-3780mm, Length=400mm, Width=70mm, Depth=40mm .

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Prior to welding, Mr. Wai Kit Lai was observed preheating the weld to over 350° Fahrenheit with Miller ProHeat 35 heat induction blankets and hand held propylene torch. The welding parameters were verified by QC Inspector Jesse Cayabyab with a Fluke 337 current clamp meter and preheat was verified with temperature indicators per ABF Welding Procedure Specification (WPS) ABF-WPS-D15-1000-Repair Rev.3. Mr. Cayabyab performed welding parameter verifications at random intervals for the duration of the shift. QAI performed random verifications of welding amperage throughout the shift measuring 130 to 140 amperes. Welder was observed using proper interpass cleaning methods with a slag hammer, wire wheel and light grinding.

The welding & workmanship observed on this date appeared to be in general compliance with the contract specifications. The following pictures below detail the work in progress.



Summary of Conversations:

General conversations with ABF/JV QC NDT personnel relevant to work and testing performed during this shift.

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 Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Leach,Ed	Quality Assurance Inspector
Reviewed By:	Riley,Ken	QA Reviewer
