

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014679**Date Inspected:** 03-Jun-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:	Jesse Cayabyab and William Sherwood	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 L1W/L2W edge plate 'B' outside, QA randomly observed ABF/JV qualified welder Xiao Jian Wan ID #9677 perform flush grinding on the weld cover of the splice butt joint. After completing the grinding, ABF QC William Sherwood performed a Visual Test (VT) on the completed flush ground cover and found it acceptable. QA also performed random VT on the completed butt joint and found same result.

Welder Xiao Jian Wan ID #9677 moved to OBG L1W/L2W edge plate 'F' outside and performed grinding/cleaning on the weld and the base metal. After grinding, ABF QC made a VT on the completely welded splice butt joint. During the inspection, QC informed QA that the welded butt joint was acceptable. QA performed VT on the same welded joint but found the flush cover reinforcement was over ground that it made a "disc in" profile on the surface. The depth of the over ground cover was greater than 2.0mm and it was noted at the top, middle and bottom of the joint. QC William Sherwood called his Supervisor Mike Johnson and Lead QC Jesse Cayabyab to assess the situation. This QA also called the Lead QA Danny Reyes to join the discussion. At the end, all the parties involved in the discussion agreed that there are over ground that they need to be fixed. According to Mike Johnson, QC will ask ABF Superintendent Dan Ieraci to put more welds where the reinforcements were low.

At OBG L2E/L3E bottom plate 'D' outside, QA randomly observed ABF/JV qualified welder Mitch Sittinger ID #0315 continue perform CJP groove welding repair. The welder was observed welding in the 4G (overhead)

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position utilizing Shielded metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1000-Repairs. The repair excavations were preheated to more than 140 degree Fahrenheit using propane gas torch prior welding. During the shift, ABF QC Jesse Cayabyab was noted monitoring the welder. QA randomly monitored the welding parameter with reading 126 amperes which appears in conformance to the project requirements. Prior welding, ABF QC Jesse Cayabyab was also observed performing Magnetic Particle Testing (MT) using Parker Contour Probe with red magnetic powder as detecting media on the repair excavation prior welding. During the shift, the welder has completed two welding repairs and has moved inside of the same plate and started excavating more repairs.

At OBG L5E/L6E top deck plate 'A1' outside, QA randomly observed ABF/JV qualified welder Fred Kaddu ID # 2188 perform CJP groove welding repair. The welder was observed welding in the 1G (flat) position utilizing Shielded metal Arc Welding (SMAW) with 5/32" diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1000-Repairs. The repair excavations were preheated to more than 140 degree Fahrenheit using propane gas torch prior welding. During the shift, ABF QC Steven Mc Connell was noted monitoring the welder. Prior welding, ABF QC Steven Mc Connell was also observed performing Magnetic Particle Testing (MT) using Parker Contour Probe with red magnetic powder as detecting media on the repair excavation. There were no significant defects noted during the test.

At OBG L2W/L3W side plate 'C' outside, ABF welders Rory Hogan and Jeremy Dolman were noted grinding the gouged back surface of the splice joint. The welders were using disc grinder and die grinder with a barrel bit. Before the end of the shift, grinding of the whole length of the joint was completed and the welders have called for Magnetic Particle Testing (MT) from QC. But due to QC's busy schedule, QC has scheduled it for tomorrow morning.



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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