

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-029031**Date Inspected:** 21-Jan-2013**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:	William Sherwood and Steve Jensen			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:	SAS Tower		

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 Tower Base Electro Slag Weld (ESW) joint "V" (Weld No. W-043) face B, ABF welder Eric Sparks was observed performing the repair welding (UT reject) located at Y coordinate 7725mm. The boat shape repair excavation profile was measured 110mm long x 40mm wide x 40mm deep. The welder was observed utilizing the 4 mm diameter E7018H4R electrode as per the Shielded Metal Arc Welding (SMAW) with 4mm diameter E7018H4R electrode as per the Welding Procedure Specification (WPS) ABF-WPS-D15-1000 Repair Rev. 3. Prior to the welding, the welder was noted preheating the repair area to a minimum of 350°F using propylene gas torch. The welding parameters were measured during the welding and the average amperage appeared to be 180 Amps. The weld repair was performed as per the Request for Weld Repair (RWR) #201301-028. The Quality Control (QC) inspector, William Sherwood, was observed monitoring the welding parameters and workmanship of the weld repair. The repair welding was not completed during this shift and will resume on the next scheduled shift. This task was turned over to QAI Fritz Belford.

At Tower Base Electro Slag Weld (ESW) joint "V" (Weld No. W-043) face A, ABF personnel was observed performing the excavation (UT reject) located at Y coordinate 8150mm. The repair excavation was performed as per the approved RWR# 201301-029. Prior to the excavation, the welder was noted preheating the repair area to a minimum of 350°F utilizing propylene gas torch. After completing the excavation, ABF QC William Sherwood performed Magnetic Particle Testing (MPT) and no indications were noted. The dimensions of the excavation was

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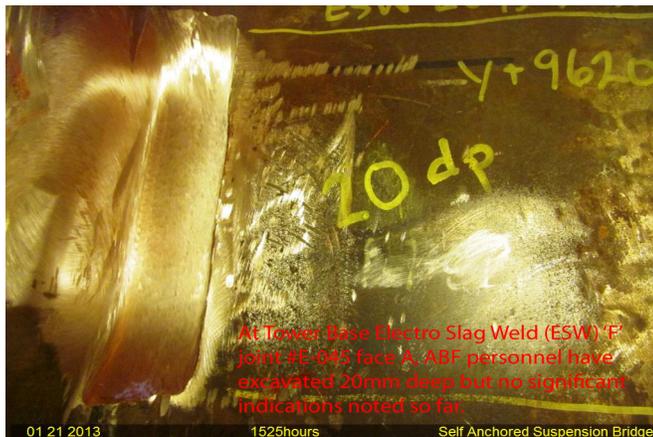
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as follows: 160mm long x 40mm wide x 37mm deep. At the conclusion of the QC testing this QAI performed MPT to verify the excavation and QC testing and at the conclusion of the testing this QAI concurs with QC assessment. The visual inspection and testing were completed during this shift. No welding was performed on this date.

At Tower Base Electro Slag Weld (ESW) joint "F" (Weld joint E-045) face A, ABF personnel was observed performing exploratory excavation (UT reject) located at Y coordinate 9620mm. This task is a carry over from the previous shift starting from the depth of 12mm deep. The grinding was performed utilizing a disc grinder with a maximum depth in 3mm increments of excavation up to 16mm deep and the remaining excavations at 1mm increments. This task was performed as a directive by the contractor to provide QC/QA inspection and testing. The Quality Control (QC) inspector Steve Jensen was observed performing Magnetic Particle Testing (MPT) at the following various depths with results recorded below. At the conclusion of the QC testing this QAI performed MPT to verify the excavation and QC inspection and testing complies with the contract documents. At the conclusion of the testing this QAI concurs with QC assessment. The excavation is completed to approximately 20mm in depth with no significant indications noted so far.

1. At 16mm deep – no significant indications noted.
2. At 17mm deep - no significant indications noted.
3. At 18mm deep – no significant indications noted.
4. At 19mm deep - no significant indications noted.
5. At 20mm deep – no significant indications noted.

This task was turned over to QAI Fritz Belford.



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Summary of Conversations:

No significant conversation occurred today.

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

Inspected By: Lizardo, Joselito

Quality Assurance Inspector

Reviewed By: Reyes, Danny

QA Reviewer