

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 #: 74.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015175**Date Inspected:** 26-May-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Goodwin Steel, UK**Location:** Trentham, UK

CWI Name:	N/A	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:	Cable Band	

Summary of Items Observed:

The following report is based on METS observations at Goodwin International, Trentham, UK on this date:

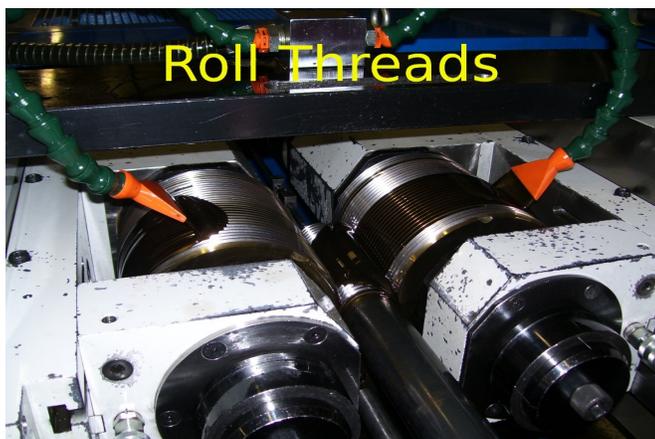
The BST Inspection Plan BST/09/087 Issue D, and Work instruction for extending thread lengths on the cable band bolts GI01 Issue 25/05/10 were presented to the QA Inspector for review. Following review, a visit was made to BST to observe the thread rectification process on the bolts that have not been previously galvanized. The process involves re machining on a CNC lathe. Following machining, the thread are brought to the final sized by rolling. The go / no go ring gages were used to verify the thread pitch dimensions and the thread length was verified. Thread length was 159 mm on one bolt and 156 mm on a second bolt. These thread dimensions comply with project specifications

The QA Inspector traveled to Goodwin International to review the Weld Excavation Map for Casting GG29431-2 a B7/F-2 cable band, and to observe welding of that Casting. The weld map was reviewed for compliance with contract specifications. This is a major repair and requires post weld heat treatment. Lot number B243-143-10 was assigned for tracking purposes. The welding of the casting commenced today. The QA Inspector observed Mr. T. Knall welder number 261. Mr. Knall was observed using the flux core arc welding process (FCAW) with filler material lot number MF7320A7. Mr. Knall setup the welding parameters and welded several test runs on scrap material to establish travel speed and heat input within parameters. The filler material is labeled "Super Cored 71 Mag", AWS A5.20/SFA 5.20 E71T-1M/E71T-9M. He was observed using 185 amps, 24.5 volts and a travel speed of 407 mm/min. This results in a heat input of .67 KJ/mm. He was observed welding excavations 1 through 12. The QA Inspector observed the welders perform verification that the preheat of the casting was above 160 degrees C. Mr. S. Woodcock was observed welding this casting during the night shift. He was observed using 190 amps,

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27 volts, a travel speed of 345 mm/min and a heat input of .89 KJ/mm in excavation 30.



Summary of Conversations:

The QA Inspector had a conversation with Mr. C. Ryder concerning metalizing of the cable band grooves. Mr. Ryder indicates that an RFI will be submitted to extend the limits for the thickness of the metalizing to indicate 375 microns minimum thickness and a maximum thickness of 540 microns. The QA Inspector suggested to Mr. Ryder that the RFI should include a demonstration that the coating will conform to the adhesion requirements of the specifications.

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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 Nina Choy, (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Riegler,Randy	Quality Assurance Inspector
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Reviewed By:	Edmondson,Fred	QA Reviewer
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