

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 13.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-010468**Date Inspected:** 30-Nov-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1000**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1830**Contractor:** Oregon Iron Works Clackamas, Or.**Location:** Clackamas, OR

CWI Name:	M. Gregson, J. Salazar, S. Barnett	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:	Hinge K Pipe Beams	

Summary of Items Observed:

The Quality Assurance Inspector Sean Vance arrived on site at Oregon Iron Works, Inc (OIW) in Clackamas, OR, to randomly observe the in process welding of the Hinge K Pipe Beam assemblies. The QA Inspector arrived on site to randomly observe the OIW Quality Control (QC) Inspectors in process and completed visual and nondestructive testing. Upon the arrival of the QA Inspector the following observations were made:

Hinge-K Pipe Beam Assembly 102A-1: 11/30/09

a111-1 Forging to a110-1 Base Plate

QA Inspector witnessed welder #H49, Mr. Rick Hinckle and welding foreman Troy Smith, cutting the bevel on the a106/a106 and b106 plates, in preparation for fitting the a109 Post Tension Cap plate. QA Inspector noted that an automatic beveling machine was positioned on each plate and was set to cut a bevel prep-angle of 60 degrees. QA Inspector reviewed the contract requirements on the joint details and noted that this was designated as a AWS D1.5 TC-P4-S, partial penetration (PJP) groove weld, with a 60 degree bevel prep and 30mm weld size. QA Inspector randomly measured, utilizing a bridge cam gauge and verified the previously beveled areas to be 60 degrees, which appears to be in-compliance with the weld joint details and contract requirements.

Note. QA Inspector later noticed that the beveling was complete, on the above mentioned plates and OIW was in-process of fitting the a109 Cap plate and was currently placing the threaded rods in place, to prevent Cap plate moving and/or distortion during the SAW on these PJP weld joints. See attached pictures below.

Hinge-K Pipe Beam Assembly 102A-3: 11/30/09

a111-3 Forging to a110-3 Base Plate

QA Inspector noticed that the partial joint penetration and fillet welds were previously completed, on the HPS

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485W stiffeners and OIW production personell were in-process of performing weld clean-up, on the above mentioned stiffeners. QA Inspector spoke with QC Inspector Jose Salazar and Mr. Salazar explained that OIW welders # O6, Mr. Tim O'Brian and #T23, Mr. John Tellone were blending the weld start/stops, removing weld spatter and grinding all areas, which were previously marked by OIW QC Inspectors. Mr. Salazar also explained that the completed fillet and PJP welds on above mentioned stiffeners, which were found to be visually acceptable per AWS D1.5 and contract requirements, will then be 100% magnetic particle tested by qualified OIW QC Inspectors. QA Inspector noted that the in-process visual testing by OIW QC Inspector Jose Salazar, appeared to be in compliance with AWS D1.5 and contract requirements.

QA Inspector noted that swing shift QC Inspector Steve Barnett was in-process of performing 100% magnetic particle testing on the above mentioned stiffeners, on this assembly 102A-3.

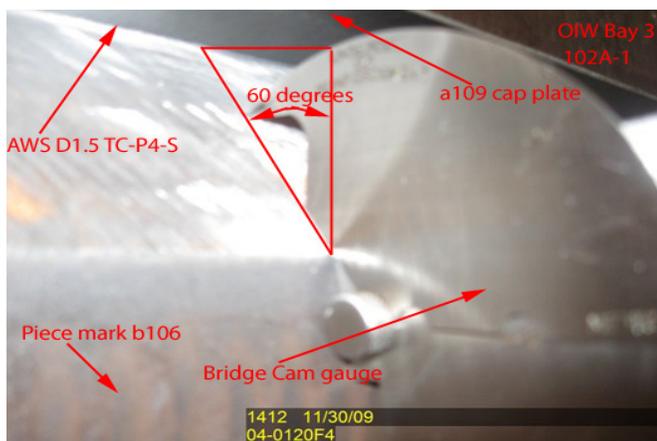
Note: QA Inspector later spoke with QC Inspector Steve Barnett and Mr. Barnett explained that the magnetic particle testing was performed on the following weld joints and no rejectable indications were found: WJ # W1-02, W1-05, W1-06, W1-09, W1-10, W1-80, W1-81 and W1-123. Mr. Barnett explained that the above mentioned weld joints were previously visually inspected and weld areas that were marked up for repairs and or clean-up, were completed and then visually re-inspected and were in conformance with AWS D1.5, visual testing requirements. Mr. Barnett explained that the applicable visual/magnetic particle testing reports were completed and Mr. Barnett had written VT/MT ok next to each weld joint, to notify production personell that QC Inspection was complete and acceptable. Mr. Barnett explained to QA Inspector that graveyard shift, QC Inspector John Nikolich, will continue to perform the visual/magnetic particle testing on these completed stiffeners. QA Inspector will not be present on this scheduled graveyard shift.

Material, Equipment, and Labor Tracking

QA Inspector Sean Vance performed a verification of material, personnel and equipment involved with the project. The QA Inspector observed at Oregon Iron Works: 2 OIW production personnel and 2 QC Inspectors.

The QA Inspector noted that the following personell were present at AG Machine shop: 1 machinist and 1 supervisor.

The QA Inspector noted that no work was performed at OIW Vancouver paint shop:



Summary of Conversations:

As noted above.

Comments

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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 Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Vance,Sean	Quality Assurance Inspector
Reviewed By:	Adame,Joe	QA Reviewer
