

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 #: 99.28**WELDING INSPECTION REPORT**

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

Report No: WIR-030106
Date Inspected: 02-Oct-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:	Tony Sherwood, Bernie Docena	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 Quality Assurance Inspector Simion Ramirez (QA Inspector) arrived at job site. QA Inspector performed random QA visual testing (VT) and non-destructive testing (NDT) of ongoing ABF production work. QC Inspectors verified joint fit-up and pre-heat and checked electrical welding parameters of each welder at the start of shift and randomly until the end of shift. Welding procedure specifications (WPS) for complete joint penetration (CJP) welds and partial joint penetration (PJP) were available for reference on site. Caltrans QA Inspector random observation of quality control functions are noted below:

Tower Skirt: In Process Welds, Skirt Base Plate Jt's #001

ABF personnel continued fit-up and welding of joints #001 CJP splice welds noted above. WPS #ABF-WPS-D15-2030-1 for flux core arc welding (FCAW) was utilized by QC Inspectors. Approved welder installed stringer passes and operated welding equipment within WPS electrical parameters. Be advised that the backing bar for joint #001 and #002 will remain in place, in accordance with RFI# ABF-RFI-003417R00.

- The weld joint fit-up and alignment was checked with a straight edge and bridge cam gauge.
- Pre-heat was performed with a rosebud torch and verified by QC with temperature stick (250°F).
- Welding was performed by approved welders (Kit Li).
- Electrical parameter check results for Kit Li (20.5 volts / 315 amps).
- The weld procedure and joint details utilized (FWT22) is CJP weld.
- Electrode utilized is FCAW NR-232, .072" diameter.
- Weld passes were de-slugged by grinder and wire wheel.

Tower Skirt: NDT Weld Jt's, Base Pl. #002 CJP Splice,

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Weld crowns of CJP welds are in the as welded condition with 1/16" reinforcing on face side. QA Inspector observed QCI perform UT inspection on approximately 25% of CJP weld #002, QC deemed results acceptable, inspected at 1600 hours. Reference QA NDT reports for details.

Summary of Conversations:

Only general conversation regarding the comments above. Electronic communication with SMR regarding skirt weld root gaps at #155 W and #155 N shaft.

QC UT completed weld #002 base plate splice.



Weld #001 base Pl. splice prior to removing tabs.



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: Ramirez, Simion

Quality Assurance Inspector

Reviewed By: Riley, Ken

QA Reviewer
