

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-026435
Date Inspected: 28-Sep-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1530
Location: Job Site

CWI Name: As noted below
Inspected CWI report: Yes No N/A
Electrode to specification: Yes No N/A
Qualified Welders: Yes No N/A
Approved Drawings: Yes No N/A

CWI Present: Yes No
Rod Oven in Use: Yes No N/A
Weld Procedures Followed: Yes No N/A
Verified Joint Fit-up: Yes No N/A
Approved WPS: Yes No N/A
Delayed / Cancelled: Yes No N/A
Component: OBG Components

Bridge No: 34-0006**Summary of Items Observed:**

Quality Assurance Inspector (QA) William Clifford was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

East Line

This QA randomly observed ABF/JV qualified welder Jorge Lopez #6149 performing Shielded Metal Arc Welding (SMAW) with 5/32" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1050A-CU. The joint being welded was a 14mm plate insert at the "A" deck to close the lifting lug deck penetration holes. This work was located at E4-PP114-L#4 and was performed in the flat position from the top of the "A" deck plate.

During welding, ABF Quality Control (QC) Fred Vonhoff was noted monitoring the welding parameters. Welding parameters were recorded as (A=151).

This QA randomly observed ABF/JV qualified welder Fred Kaddu #2188 performing Shielded Metal Arc Welding (SMAW) with 5/32" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1050A-CU. This was a Complete Joint Penetration (CJP) weld on a 14mm plate insert at the "A" deck to close the lifting lug deck penetration holes. This work was located at E3-PP114-L#4 and was performed in the overhead position from the bottom of the "A" deck plate.

During welding, ABF Quality Control (QC) Fred Vonhoff was noted monitoring the welding parameters.

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Welding parameters were recorded as (A=120).

Approximately:

10:00 this QA observed QC Fred Vonhoff perform Magnetic Particle (MT) of the back gouged welds at this panel point E3-PP104-L#1&3 location. Mr. Vonhoff recorded no rejectable indications at this time.

11:00 this QA observed QC Pat Swain performing Magnetic Particle Testing (MT) of the Complete Joint Penetration (CJP) 20mm man way access fill plate at "A" deck designated as 8E-PP61.5-E5 NW.

Testing is in process and no reports QC have been filed at this time.

12:30 this QA observed QC Pat Swain performing Ultrasonic Testing (UT) of the Complete Joint Penetration (CJP) 20mm man way access fill plate at "A" deck designated as 8E-PP61.5-E5 NW.

Testing is in process and no reports QC have been filed at this time.

Ultrasonic Testing

This QA performed Ultrasonic Testing (UT) on approximately 20% of the man way access hole weld at 8E-PP61.5-E5-NW. This weld was previously accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3.

This QA observed no rejectable indications at the time of testing. This QA generated a TL-6027 UT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications.

Included in this testing percentage are the first time repairs (R1) that were previously rejected by QCUT. These welds have been repaired and accepted by QC at time of QA testing.

Repair area locations are:

Y= 965mm, 2220mm, 3435mm, and 3835mm.

This QA also performed Ultrasonic Testing (UT) on approximately 100% of the transverse stiffener weld at 8E-PP61.5-E5-TS. This weld was previously accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3.

This QA observed no rejectable indications at the time of testing. This QA generated a TL-6027 UT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications.

Magnetic Particle Testing

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 20% of the man way access hole weld at 8E-PP61.5-E5-NW. This weld was previously accepted by QC Magnetic Particle technicians. This QA observed no rejectable indications at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications.

Repair area locations are:

Y= 965mm, 2220mm, 3435mm, and 3835mm.

This QA Inspector also performed Magnetic Particle Testing (MT) of approximately 100% of the transverse stiffener weld at 8E-PP61.5-E5-TS. This weld was previously accepted by QC Magnetic Particle technicians. This QA observed no rejectable indications at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work observed at this location appeared to be in compliance with the contract

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specifications.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

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

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| Inspected By: | Clifford, William | Quality Assurance Inspector |
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| Reviewed By: | Levell, Bill | QA Reviewer |
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