

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 #: 69.12**DAILY PROJECT JOURNAL****Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Report No:** DPJ-000711**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Dated:** 19-Mar-2008**Location:** Changxing Island, Shanghai, PRC**Submittals(New / Total):****CWR's:** /**HSR's:** /**NCR's:** /

Item	Title	Detail
1	Key conversations	<p>1030-Talked with Soononn Low, ABFJV and made him aware that FCN #39 regarding the change to the 77m mockup fabrication plan was rejected by Design. Mr. Low was not aware of the rejection.</p> <p>While in the office I talked to John Hamer. Mr. Hamer asked if I had any objections to ZPMC removing more fit lugs than was specified. I told Mr. Hamer that it is an issue because ZPMC is unable or unwilling to follow approved procedures. When I questioned him about why ZPMC did not follow their procedure he told me there was a problem with the translation between the Technical Department and Fabrication. Mr. Hamer then asked if I had any technical exception to the removal of extra fit lugs. I discussed that I thought ABFJV asked to only remove one set of fit lugs to decrease time and that the decision was based on time rather than a technical reason. I did say that Dr. Wahbeh would have to comment officially for METS.</p>
2	Other important observations	<p>77m Mockup-No work</p> <p>89m-ZPMC was working on the Partial Mockup. ZPMC performed MT of the tack welds on 3/18/08 and found cracks in 3 of the 4 rack welds. That night (3/18/08) ZPMC removed the tack welds ground the surfaces and performed MT to verify the base metal was not damaged. Since there were cracks in the tack welds, ZPMC proceeded to Step 7 of Option 2 of the approved Partial Mockup Fabrication procedure. Option 2 calls for ZPMC to use restraining devices while welding the tack welds and production to prevent cracking. ZPMC proceeded forward with the fit lug tack welds with the restraining devices in place. By 0830 today, ZPMC had finished one fit lug fillet weld and was preheating the second fit lug in preparation.</p> <p>At 1040, I was notified by Paul Stovall that ABF had just stopped ZPMC from deviating from the approved Partial Mockup Fabrication procedure. ZPMC was preparing to turn the mockup onto skin "C" and begin welding</p>

DAILY PROJECT JOURNAL

(Continued Page 2 of 2)

the fit lugs on the skin "C". ZPMC was stopped by an ABF QC inspector. This emphasizes the poor translation of the partial mockup fabrication procedure. I notified John Hamer of this immediately.

114m- No work being performed. I observed that all bolts in the interior splice plates and exterior splice plates had been bolted. The corner stiffener connection plates are both missing from the mockup, it was previously reported that only one of the stiffener connection plates was missing but both were missing when I observed the inside of the mockup.

Bay 4- One diaphragm is complete. The completed diaphragm has been testing using UT by ZPMC on 3/15 and 3/16. This violates the 72 hour period that is required between welding and UT. ZPMC has indicated that the UT performed on the 15th and 16th were preliminary.

ZPMC is welding another diaphragm plate in the bay.

Bay 8-ZPMC is welding four diaphragm plates in the bay. Each plate is in varying stages of being welded. ZPMC has abandoned the use of thermocouples and is struggling again with achieving and maintaining the preheat temperature range. I also observed that ZPMC was using a weight to restrain the movement of the plate when welding in addition to the wedges and restraints in place. The potential for delayed cracking is increased with the stresses being locked into the welds in this condition.

3	Critical Weld Repairs (CWRs)	I reviewed and approved CWR072, and rejected CWR073 and 0074. I rejected CWR073 and 074 because ZPMC previously submitted CWR051 and CWR052 for the same weld joint, both CWRs were approved on 3/7/08. In the remarks I asked ZPMC to clarify if these were new cracks in the same weld joint or the same cracks.
4	Other important observations	I reviewed and rejected weekly reports 7, 17, 18, 19, 20, 21 because the Contractor failed to demonstrate that there is a system to comprehensively "track all welds, NDT, any required repairs, and re-inspection of non-conforming welds," as stated on page 153, Item L of the Special Provisions.

Inspected By: Ishibashi, Josh
Reviewed By: Wahbeh, Mazen

Quality Assurance Inspector
QA Reviewer
