

## M E M O R A N D U M

**TO:** Governing Board Members

**FROM:** Tommy B. Strowd, Director, Operations, Maintenance & Construction Division

**DATE:** September 8, 2011

**SUBJECT: PR10140338-1 - S-6 Gearbox Replacement – Anchor Repairs**

**Background:** The project to replace the right angle gear drives for the 3 pumps at S-6 was completed in May 2010. In September 2010 the gearbox for unit 1 was determined to have failed, was removed by the construction contractor (DN Higgins) under warranty and returned to the manufacturer (Lufkin) for repairs. Unit 1 was re-installed at the end of May 2011 and a check of the other units found an alignment problem with Unit 3. The investigation revealed that the anchors bolts holding down the gearbox had broken loose from the concrete foundation causing the misalignment. These bolts were installed during a previous repowering project approximately 20 years ago and no as-built information was available for this project. Further investigation revealed that the anchors were inadequately embedded in the concrete foundation. To correct the problem the gearbox must be removed from the concrete foundation, the existing anchors removed, the foundation modified, new anchors installed and the gearbox reinstalled and aligned. Loose anchors were subsequently discovered on Unit 2 and on the recently re-installed Unit 1. Unit 2 can be temporarily repaired for the wet season however Unit 1 will need immediate repairs similar to Unit 3.

**How this helps meet the District's 10-year Strategic Plan:** The S-6 pump station is of vital importance to the District's mission of flood protection. It is one of the most highly used pump stations in the District's inventory. The Hurricane / wet season started June 1<sup>st</sup> and the District is at significant risk having any of the pumps off line during this period. Temporary bypass pumps were installed when Unit 1 was out of service earlier this year and are still available for use however together they only provide approximately half the flow capacity of one of the permanent pumps.

**Funding Source:** A not to exceed amount of \$191,845.28 of which \$191,845.28 is budgeted using ad valorem funds within the Operations, Maintenance & Construction Division (OMC), Engineering & Construction Bureau in FY11.

**This Board item impacts what areas of the District, both resource areas and geography:** This item impacts OMC Division resources in Palm Beach County. The project's deliverables will have a direct impact on the S-6 drainage basin.

**What concerns could this Board item raise?**

This Waiver of Competition is an exception to the District's general standards of competition. Due to the emergency nature of the situation, the selection of DN Higgins to perform the work is in the best interest of the District for the following reasons:

1. DN Higgins is familiar with the systems having just replaced the gearboxes. They also have the staff and resources to complete the work expeditiously.
2. There are some ongoing warranty issues with the gearboxes. Having a different entity repair the anchor bolts may negatively impact the warranties with DN Higgins and Lufkin.

**Why should the Governing Board approve this item?**

Given the circumstances as described above, options are limited regarding the normal competitive process. Therefore, a waiver of competition is recommended. The cost proposal provided by DN Higgins has been reviewed by District staff including the District's Construction Cost Estimator to ensure that it is fair and reasonable.