

**TO:** John P. Castro, City of Key West

**COPIES:** John Bartelmo, CH2M./ OMI, Inc.

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**FROM:** Ricky Collins, CH2M. / OMI, Inc.

**DATE:** November 23, 2015

**SUBJECT:** Lift Station "B" Impeller Replacement

### **Action statement:**

To purchase an impeller for pumps located at L/S "B" on Greene Street

# **Background:**

The pumps at lift station "b" located on Green Street special order impellers. Station "B" is one of the most critical locations of any pump station on the island due to the large collection system sewage flow it receives from the B district.

### **Purpose and Justification:**

The station located in this district is on the force main system and is a critical part of the sanitary sewer system. The station also receives high influent during storm conditions and is taxed heavily during these events. And with the addition of de-watering associated with the Carolyn Street project the extra flow will be taxing the station heavily for the next nine months. It is equipped with two 60 h.p. Flygt submersible pumps.

# **Options:**

The City could opt to forego the purchase of the impeller. The disadvantage to this option is that failure of a pump (s) during a high flow condition would result in an immeasurable sewage spill.

A second option is to purchase a new impeller to have in stock at a cost of 11,197.00

The most practical option is to purchase the impeller to give the City continued maximum pumping capacity at a critical lift station under these adverse conditions.

#### **Financial Impact:**

Impact to the general sewer fund will be \$ 11,197.00

# **Recommendation:**

Staff recommends the purchase of the impeller.