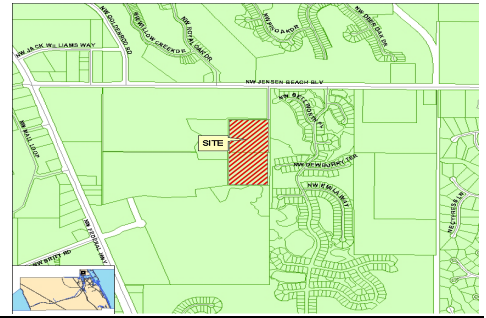


## North Feed Pump and VFD Replacement

**Category** Non-concurrency  
**Project Number** 3144  
**Location** Jensen Beach  
**District** 1  
  
**Project Limits** North Water Treatment Plant  
  
**Related Projects**  
**Lead Dept/Division** Utilities  
**Year Project Initiated** Approved during FY17 CIP Workshop



### DESCRIPTION

Existing Reverse Osmosis (RO) feed pumps and variable frequency drives (VFD) for the Jensen Beach RO Water Treatment Plant will be replaced.

### BACKGROUND

The current feed pumps are approximately 20 years old and have been rebuilt multiple times. The existing high speed feed pumps will be replaced with lower speed pumps to increase the life expectancy of the pumps.

### PROJECT ORIGATION

Infrastructure Needs

### JUSTIFICATION

Replacement will improve system reliability and maintain the current level of service. The feed pumps have become increasingly unreliable and at any given time the chances of one of the four feed pumps being out of service is fairly high. The VFDs need to be replaced with the change from higher speed pumps to lower speed pumps and the incompatibility of the existing VFDs with the new proposed pumps.

AFTER MODIFICATION				Funded					Unfunded
Expenditures	Total	To Date		FY22	FY23	FY24	FY25	FY26	FY27-FY31
Construction	1,378,986			1,378,986					
<b>Expenditure Total</b>	<b>1,378,986</b>			<b>1,378,986</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Revenues	Total	To Date	Carryover	FY22	FY23	FY24	FY25	FY26	FY27-FY31
Utilities R&R	1,378,986			1,378,986					
<b>Revenue Total</b>	<b>1,378,986</b>			<b>1,378,986</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Unfunded</b>									<b>0</b>

### OPERATING BUDGET IMPACT

There will be reduced maintenance costs associated with the newer feed pumps and variable frequency drives.

BEFORE MODIFICATION				Funded					Unfunded
Expenditures	Total	To Date		FY22	FY23	FY24	FY25	FY26	FY27-FY31
Construction	1,250,000			1,250,000					
<b>Expenditure Total</b>	<b>1,250,000</b>			<b>1,250,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Revenues	Total	To Date	Carryover	FY22	FY23	FY24	FY25	FY26	FY27-FY31
Utilities R&R	1,250,000			1,250,000					
<b>Revenue Total</b>	<b>1,250,000</b>			<b>1,250,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Budget transfer of \$128,986 from unused funds in the completed Sand Filter project 3609