



Agenda Item #: \_\_\_\_\_

# Staff Report

## City of Manhattan Beach

**TO:** Honorable Mayor Tell and Members of the City Council

**THROUGH:** David N. Carmany, City Manager

**FROM:** Jim Arndt, Director of Public Works  
Raul Saenz, Utilities Manager  
Brian Wright, Water Utility Supervisor

**DATE:** April 3, 2012

**SUBJECT:** Approve Plans and Specifications and Authorize the City Manager to Seek Bids for a Construction Contract for the Water and Wastewater Voltage Suppression Project

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### **RECOMMENDATION:**

Staff recommends that City Council approve plans and specifications for the Water and Waste Water Facilities Voltage Suppression Project and authorize Staff to solicit construction bids.

### **FISCAL IMPLICATION:**

Water Enterprise Funds (501-18-231-6121) in the amount of \$36,714 and Waste Water Funds (503-18-321-6121) in the amount of \$38,113 have been appropriated for this project through the Fiscal Year 2011-2012 budget.

### **BACKGROUND:**

The City of Manhattan Beach operates eight (8) potable water and ten (10) waste water facilities that require electrical power, provided by Southern California Edison. These facilities utilize electrical equipment, Program Logic Controllers (PLC's), Variable Frequency Drives (VFD's), Soft Starts and SCADA Systems that are vulnerable to unpredictable and sometimes damaging voltage spikes from the electrical utility service provider. In an effort to protect the critical equipment located at each of the facilities, voltage suppression systems will be installed at the point of incoming electric power to intercept and suppress power voltage spikes. The installation of the voltage suppression systems could potentially save costly electrical equipment and reduce the risk of damage to the City's SCADA System components.

This project will involve:

- Correctly sizing individual voltage surge suppression systems to adequately protect each facility based on the size and service of each facility.
- Installing voltage suppression systems according to manufacturer specifications and all applicable electrical construction code.
- Wiring and programming voltage suppression systems according to manufacturer specifications to provide optimum power protection to each facility.
- Provide City with wiring diagrams for each of the installed voltage suppression systems, to include all new and/or modified equipment and materials.

**DISCUSSION:**

The fiscal year 2011-2012 budget includes funding to purchase and install voltage suppression units at each of the Water and Wastewater Pumping Facilities. If approved by City Council, Staff would proceed to advertise the project for construction bids. Bids would be opened in late April, 2012 and construction would begin in May, 2012.

Specifications

Specifications for the 2011-2012 Water and Waste Water Facilities Voltage Suppression Systems Project are available for review in the City Clerk's Office at City Hall.