

# CITY OF EL MIRAGE CAPITAL PROJECT

## WRF Aeration System Improvement



**Submitted Department:** Public Works  
**Budgeted Department:** Sewer  
**Division:** N/A

**Strategic Priorities:**

### PROJECT OVERVIEW

**Project No.:** 62122  
**Account No.:**  
**Project Amount:** \$ 1,075,000  
**Start Date:** July-2020  
**Grant Funding:** Yes  No   
**Related Projects:**  
**Project Status:** New

### PROJECT DESCRIPTION

This request is for aeration system improvements needed at the Water Reclamation Facility. This project consists of replacing the existing 4 K Turbo aeration blowers with new Aerzen hybrid units. The project also includes the installation of an evaporative cooling system and modifications to the aeration piping for each blower. A preliminary estimate for the total cost of this project is \$1,075,000. Please see cost per item Blowers - Aerzen Hybrid (4): \$530,000 Installation: \$132,500 Electrical: \$20,000 Miscellaneous 20%: \$136,500 HVAC in Blower Room: \$31,500 Engineering Design: \$127,000 Contingency: \$97,500 Project Total: \$1,075,000

### PROJECT JUSTIFICATION

An engineering study was completed last fiscal year that identified operational issues and inefficiencies with the current turbo blowers used at the plant for aeration. The existing blowers are 10 years old and nearing their end of useful life, no longer serviceable by the manufacturer, and replacement parts are not very limited. New hybrid blowers will reduce operating and maintenance costs, improve reliability, and increase efficiency at the plant.

### CIP REQUEST

Category:	Fund #	Funding Source:	FY20/21	FY21/22	FY22/23	FY23/24	FY24/25	TOTAL REQUESTED
Design								\$0
Land								\$0
Equipment	54-Sewer	Fees	\$537,500	\$537,500				\$1,075,000
Buildings								\$0
Improvements								\$0
Total by Year			\$537,500	\$537,500	\$0	\$0	\$0	
<b>TOTAL</b>								\$1,075,000
			FY20/21	FY21/22	FY22/23	FY23/24	FY24/25	<b>TOTAL</b>
<b>Total Operating Costs</b>								\$0
<b>Total Anticipated Revenue/Cost Savings</b>								\$0

### PROJECT IMAGES



Current WRF Blower System



Aerzen Hybrid Blower Unit