

JUSTIFICATION FOR THE PURCHASE OF A NEW FOUNTAIN IN 2021

Summary

During the summer of 2020, the Windrush community fountain stopped working and was removed from the pond. It was determined that it could not be repaired. After research and investigation, it was decided now would be the best time to purchase a new, state-of-the-art fountain.

This new fountain is expected to serve our Windrush community efficiently and economically for the next 30 years.

Problem

The Windrush community fountain was purchased in 1992 from Ameriflora. After it stopped working last summer, it was found that this time it could not be repaired. The estimate was \$2,300 to get a new motor. This fountain lasted for 30 years. It would not have lasted anywhere near that long had it not been for the tireless effort of Jim Williams. This history of repairs is documented quite extensively in Windrush Newsletters and Annual POA Minutes dating back to 2012. New motors, cables and lights seemed to always quit working. In the end the Trustees upon recommendation of the Pond Committee felt it should be replaced.

Additionally, the electrical power distribution box that provides power to the aerators and fountain is not up to today's safety and maintainability standards and subject to being misused and vandalized. It needs to be brought up to code.

Benefits of a pond fountain

Improves the overall water quality

When there is a lack of oxygen in a lake or pond, bottom sediments release gases that can cause water quality problems. Proper aeration brought on by a water fountain allows for many of the factors of poor water quality to be mitigated. Fountains assist in the process of moving the water from the surface with the bottom. The water towards the bottom becomes oxygenated through the aeration brought on by the fountain. This process allows the hydrogen sulfide gas that collects at the bottom of lakes and ponds to be greatly reduced.

Fountains and the aeration process they assist in creates a healthy ecosystem in our pond. By improving the oxygen levels both at the top and the bottom of your lake or pond, fish life and other aquatic organisms can thrive and a healthier habitat for the pond is created and maintained.

Helps to control and reduce excessive algae growth

Fountains and the aeration process of adding oxygen to the body of water help starve out the nutrients that algae need to grow and prosper. The aeration caused by fountains also effectively mixes algae spores into the deeper parts of the lake or pond so that they will have less available sunlight and time to grow.

Aesthetics

The Windrush community has enjoyed the pond fountain for 30 years. Along with serving practical purposes, fountains also provide aesthetic benefits. All fountains, even those designed for a specific use, are generally aesthetically pleasing.

Analysis

In choosing a replacement fountain, these factors were considered:

- Durability and maintainability,
- compatibility with the size and depth of our pond,
- aesthetic qualities,
- initial and ongoing costs
- the health and well-being of the pond

The life and durability of the fountain parts and accessories depends on the type and quality of the material. The size, shape, and depth of the fountain drives the selection of the proper fountain. Two things that were looked into:

- the horsepower of the fountain pump
- the spray pattern of the fountain

We extensively shopped several fountain companies and pond maintenance companies, Pond Guys, J-Tek and AquaDoc. Although some sticker shock at the prices was experienced, all fountains considered were in the same ballpark price range.

The fountain that was selected is called “The Crown and Geyser” by Aqua Master. At 2 hp, this gives a dramatic pattern that achieves both beauty and aeration results. The nozzle combines a lower tier Crown with the vertical Geyser column of water through its center.

This AquaMaster Fountain System includes: 2 HP 240-volt Motor, 150 ft. motor cable, Programmable Control Panel, LED lighting, 150ft. lighting cable Crown & Geyser Spray Pattern.



Finances

Both installation of the fountain and mounting the fountain control panel were included in the investigation of a solution. Since the aging electrical panel is not up to today's safety and maintainability standards, it will be included in the project.

The price for the new equipment is substantial. The choice to act now is based upon:

- maintaining the health and well-being of the pond
- an expected price increase of several hundred dollars for fountain components
- the negotiated payment plan
- currently having resources in the budget

We anticipate that future POA costs for electricity and maintenance of the new fountain will be considerably less than with the old fountain throughout the expected 30-year life span.

The plan calls for the POA to make a down payment this winter and complete the purchase in August 2021.

Fountain installation and mounting of control panel	\$10,642.20
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Replacement of the electrical distribution box	\$1,533.05
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