

APPROVED

JUN 17 2021

BOARD OF RECREATION AND PARK COMMISSIONERS

BOARD REPORT

NO. 21-106

DATE June 17, 2021

C.D. 15

BOARD OF RECREATION AND PARK COMMISSIONERS

SUBJECT: CABRILLO MARINE AQUARIUM: DONATION OF FUNDING FOR LIFE SUPPORT SYSTEM DESIGN SERVICES FROM THE FRIENDS OF CABRILLO MARINE AQUARIUM

AP Diaz	_____	* M. Rudnick	<u>MR</u>
H. Fujita	_____	C. Santo Domingo	_____
J. Kim	_____	N. Williams	_____



General Manager

Approved X Disapproved _____ Withdrawn _____

RECOMMENDATIONS

Accept a donation from the Friends of the Cabrillo Marine Aquarium (FCMA) in the amount of One-Hundred Eighty-Eight Thousand Dollars (\$188,000) to fund the completion of schematic design and construction documents to assess and replace the Cabrillo Marine Aquarium (Aquarium) life support system as set forth in this Report and direct that appropriate recognition be given to the donor.

SUMMARY

The Aquarium is planning an extensive renovation of the existing life support system that supports all aquatic life in the Susanne Lawrenz-Miller Marine Exhibit Hall (Exhibit Hall). The current system processes four different sea water systems that are connected to the public aquaria in the Exhibit Hall for a total of about 20,000 gallons of seawater. Each system is temperature controlled and is processed through various forms of filtration; sand filters, carbon filters, and protein fractionators. The Aquarium is dependent on its living marine life collection for its operations.

The Aquarium life-support system was constructed for the opening of the facility in 1981. Over the years, the enclosed life-support mechanical plant has corroded because of its location at Cabrillo Beach and the corrosive nature of the salt water that is processed in the system. In order to replace the sea water life support system and stay open for public programs, a new sea water life support system needs to be designed, constructed, and strategically phased into operation upon its completion. During the final phases of installation, life support operations cannot be disrupted for more than 2-3 hours. Collaboration between staff, contactors, and installers will need to be coordinated in order to preserve the living collections within the Exhibit Hall. The standards and technological advancements in aquarium filtration have dramatically

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changed since the design of the existing sea water life support system. Additionally, there have been many significant advancements in safety, security, remote monitoring, and emergency alerting technology.

The existing life support system is failing and it is placing the facility and the aquatic life at the aquarium in jeopardy. The state of the existing system also puts the Aquarium's Association of Zoos and Aquariums accreditation standing in peril. A conceptual and schematic design from an experienced and knowledgeable aquarium life support professional is the critical first step. This design process will combine the knowledge and skills of existing staff with the expertise of a reputable life support design firm. Delivery of detailed design and schematics for the renovation of the life support system will precede the production of construction documents, which will be the next phase of this project.

The total donation from the FCMA which is the subject of this Report is in the amount of One-Hundred Eighty-Eight Thousand Dollars (\$188,000), with approximately \$28,000 allocated to fund the conceptual design and schematic phase, which will include full architectural, engineering, and cost estimating engineering services. Upon completion of an approved design, the project will move forward with full architect and engineering development, with the rest of the donation (\$160,000) funding such effort. This final phase will include construction documentation, permitting phases, construction administration, and incorporation of additional engineering disciplines in order to provide required construction permit and documents. This donation illustrates FCMA's critical role as an instrumental partner in supporting the Aquarium and its operations.

FISCAL IMPACT

Acceptance of the donation will have no fiscal impact on the Department of Recreation and Parks' (RAP) General Fund.

STRATEGIC PLAN INITIATIVES AND GOALS

Approval of this Board Report advances RAP's Strategic Plan by supporting:

Goal No. 2: Create & Maintain World Class Parks and Facilities

Outcome No. 4: improved Park system planning and management using technology solutions

Result: A conceptual and schematic design that will replace the current system while allowing the Aquarium to remain operable.

This Report was prepared by Crislyn McKerron, Chief Management Analyst, Cabrillo Marine Aquarium.