June 16, 2022

Honorable Mayor and Members of City Council
City of Alexandria
301 King Street
Alexandria, VA 22314

RE: Waterfront Flood Mitigation

Dear Mayor Wilson and Members of City Council,

On behalf of the City’s Park and Recreation Commission, I encourage you to support a modernized, greener approach to managing the stormwater issues at Alexandria’s prized waterfront. In particular, the City should take this opportunity to maximize passive underground stormwater storage at Waterfront Park and Founders Park and add green infrastructure/bioretention features to both parks that enhance and are consistent with current park features. In addition to supporting flood mitigation, the Commission also recommends fully funding the final condition of our Waterfront Parks – completing the parks as envisioned in the Waterfront Plan as a part of this project.

The waterfront is one of Alexandria’s most prominent and important gathering places for residents and tourists alike. Its commercial spaces, coupled with highly utilized parks and other open space areas, ensure that it will remain popular with businesses and customers for years to come. However, the economic and social costs to the businesses, waterfront residents, and the City as a whole, caused by the more frequent and severe flooding requires aggressive action.

To that end, the Park and Recreation Commission strongly recommends adding underground stormwater storage and complementary bioretention facilities at Founders and Waterfront Parks, and any other park along the waterfront where these facilities are useful and appropriate. These facilities will have at least four primary benefits:

1) Improve capacity of the planned baseline system, which is necessary given the recent and projected increase in flood events. The baseline system was designed a decade ago, when many assumed that there was more time before the City began to experience the effects from climate change on storm frequency and intensity that we are witnessing now. The system needs additional capacity to handle the more frequent, larger storms; utilizing the space underneath and around our parks in a manner that doesn’t affect their overall utility is an elegant solution.
2) Enhance resiliency of the stormwater system by diversifying the means of handling stormwater. Adding significant passive capacity will mitigate against system (i.e., the planned pumps and pipes) failures due to power outages during storms. The passive storage will also have the benefit of reducing size and energy requirements of the mechanical system if the water can be pumped out at a slower rate due to the increased retention capacity.

3) Improve water quality in the Potomac River and accelerate achievement of related Environmental Action Plan 2040 (EAP) goals. The EAP calls for an ‘all of the above’ approach to addressing stormwater and flooding problems, as well as the related challenges with meeting water quality requirements for Alexandria’s watershed pursuant to the Chesapeake Bay TMDL, MS4 permit, and other associated discharge limits. In addition to providing vital flood mitigation services, the underground storage facilities and bioretention/green infrastructure will accelerate meeting water quality requirements for nutrients and sediment, in keeping with being an ‘Eco-City’.

4) Augment the biodiversity and educational opportunities in Founders and Waterfront Parks and other open space areas along the waterfront. Bioretention facilities will contribute to flood mitigation and improve water quality in the Potomac River by naturally filtering out nutrients, sediment, and other pollutants with more localized impacts. This ‘green’ (as opposed to ‘gray’) infrastructure has significant co-benefits as well. It provides habitat for native species of plants and animals, contributes to the City meeting its ambitious 40% tree canopy goal, and facilitates educational opportunities for the community to learn about these important issues. All of this can be achieved while also maintaining the current programming at the parks and other open spaces along the waterfront.

To be sure, construction and installation of these facilities will disrupt areas of Alexandria’s waterfront in the short-term, and the City should include basic restoration of the existing open space with the presently available funds. However, the overall, long-term benefits will outweigh the short-term disruptions associated with the project construction and will enhance the resilience, sustainability, and beauty of the City for decades.

Please do not hesitate to reach out to the Commission if we can further advise on this issue.

Sincerely,

Steve Beggs, Chair
Park & Recreation Commission

Geoff Goode, Planning District II
Park & Recreation Commission

cc: Park & Recreation Commission members
James F. Parajon, City Manager
Debra Collins, Deputy City Manager
Emily Baker, Deputy City Manager
James Spengler, Director, Recreation, Parks & Cultural Activities
Jack Browand, Deputy Director, Recreation, Parks & Cultural Activities
Terry Suehr, Director, Department of Project Implementation
Matthew Landes, Division Chief, Department of Project Implementation