

Promoting Maryland Architecture Since 1965

25 February 2020

The Honorable Maggie McIntosh Appropriations Committee Chair Room 121, House Office Building Annapolis, Maryland 21401

Re: Letter of Support for HB 665

Public School Construction and State Buildings – Use of Geothermal Energy

Dear Chairman McIntosh and members of the Appropriations Committee:

On behalf of AIA Maryland and the nearly 2,000 Architects we represent, we fully support sustainable strategies in building design and construction as we collectively work to lessen our impact on the natural world. We support the intent of this bill, however we believe energy analysis should be done for all new state funded buildings and all should be equipped with renewable energy sources. Ground source heat pumps is one of the systems that should be considered for construction.

There are many strategies that can be employed to achieve the goals of greater energy efficiency and reducing our carbon footprint. Investment in an effective building envelope is a critical step in reducing demand for energy before building systems should enter into the picture. The incorporation of a geothermal energy system is one proven strategy for renewable energy. As with every energy system, there are specific requirements for its implementation. For example, the geology of the soil and the amount of open space available needs to be analyzed to determine the impact on the performance of a geothermal system. Geothermal projects require a relatively large initial capital investment, with small annual operating costs thereafter. This high first cost may be difficult for small construction projects to afford and alternate renewable energy systems may be more cost-effective solutions for specific cases.

Any proposed energy system should be analyzed to determine if it is the best system for a specific project. Having a life-cycle cost analysis done for a 50 year period - as required in this bill - is important to determine the return on investment any energy system, including geothermal. This is especially important for public schools, which often operate for a much longer period of time. We recommend that any energy system go through this analysis, not just geothermal. We also recommend the bill require a comparison of possible alternative renewable energy systems. This will provide the flexibility to choose the best system for each project.

We support the state leading by example and considering how to make state funded construction more sustainable. We support the intent of HB 665 and have suggested the attached friendly amendments to the bill to consider for implementation of sustainable design guidelines for publicly funded buildings. We encourage you to adopt our suggested amendments and vote to approve the amended legislation.

Sincerely

Chris Parts, AIA

Past President, AIA Maryland

The American Institute of Architects

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cc: Appropriations Committee:

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