

**CLIMATE CHANGE, ENERGY AND ENVIRONMENT COMMISSION**

**c/o Department of Environmental Services  
2100 Clarendon Blvd., Suite 705  
Arlington, VA 22201**

January 22, 2024

The Honorable Libby Garvey, Chair  
Arlington County Board  
2100 Clarendon Blvd., Suite 300  
Arlington, VA 22201

Re: Updates to the Columbia Pike Form Based Code

Dear Chair Garvey:

As you know, an important part of the Climate Change, Energy and Environment Commission (C2E2) charter is to ensure that the development of private sites is consistent with County values and objectives for sustainability, through participation in Site Plan Review Committee meetings and reviews of development plans. C2E2 was recently briefed on the proposed ordinance to update the Columbia Pike Form Based Codes – by which projects can voluntarily adhere to certain predetermined parameters and thus bypass the Site Plan Review Committee. ***We recommend that the County Board postpone approval of this update and direct the Department of Community Planning, Housing, and Development (CPHD) to revise the ordinance to be fully consistent with the County’s goal for carbon neutrality, reflect the best practices for zero carbon buildings, and align with the update of the Green Building Incentive Policy (GBIP).***

C2E2 recognizes that a form-based code can be an elegant solution to the challenge of encouraging environmental leadership in a Dillon Rule state. However, it cannot be a means by which development avoids the environmental scrutiny that comes with community engagement. We appreciate the intent of the proposed updates to the Columbia Pike Form Based Codes to include long-overdue enhancements to the current environmental standards, particularly the move to LEED Gold or Earthcraft Gold standards, and incorporate the minimum requirements for the current version of the GBIP.

As C2E2 has made clear in our evaluations of projects under the SPRC process, the current GBIP represents a minimum acceptable baseline of sustainability. Most projects fall short of what is required to meet the County’s climate goals, and, more importantly, to contribute to the critical need to phase out fossil fuels to avoid the worst consequences of climate change. The success of Arlington’s Community Energy Plan depends, in large measure, on the County’s resolve in ensuring that all buildings are at least zero carbon-ready. In practical terms, that means four things for every new and renovated building: make it highly efficient; make it

electric; make the electricity renewable; and minimize its total carbon footprint through selection of low carbon materials and responsible management of construction debris.

C2E2 recommends that the updated ordinance include the following requirements in any set of standards that allow commercial developers to bypass the Site Plan Review Committee process:

1. Establish efficiency standards that exceed 25 percent over the ASHRAE baseline and reflect gains planned or achieved by high performing buildings in the region.

Amazon's PenPlace project expects to achieve energy efficiency gains over 30 percent and energy performance models of most projects C2E2 has recently reviewed indicate that gains over 25 percent were feasible.

2. Buildings and homes should be all-electric or Zero-Energy Ready

The International Energy Agency estimates that buildings account for 30 percent of global energy consumption and 26 percent of energy-related emissions. Buildings are also constructed to have a lifespan of 30-50 years, and we must reach our goals of phasing out fossil fuels within the next two decades to avoid the most serious climate change impacts. Designing structures with electrification and other sustainability measures in mind from the beginning is much more cost-effective and straightforward than retrofitting and will save residents money on heating and cooling. Any form-based code in Arlington County must avoid locking in decades of fossil fuel use and instead embrace the transition to electrification, since electricity is the only source of energy that gets cleaner every year. An additional strategy to achieve net zero is to maximize rooftop solar and encourage battery storage for backup in a power outage.

3. All dwellings should be EV-ready, and multi-family buildings should install EV chargers for at least 10 percent of planned parking spaces and ensure that 50 percent of all parking spaces be EV ready.

Similarly, transportation electrification is a major source of emissions reductions, and electric vehicles (EVs) are on the rise in Arlington. By 2030, over one-third of U.S. auto sales could be EVs. Ensuring new residential structures are equipped with a dedicated 240V power supply in the garage area will save building owners hundreds of dollars per home in rewiring costs. And, since roughly 80 percent of EV charging takes place at home, it is particularly important that multi-family units not be left out of this transition.

4. The standard for open spaces should be replaced with adoption of biophilic design principles and utilization of green infrastructure where feasible.

C2E2 is pleased to see the proposed updates to the Columbia Pike Form Based Codes include human interaction with nature (biophilia) and recommend that any open space requirement be replaced with biophilic landscape design. While open spaces provide urban areas with

aesthetically pleasing components and provide numerous environmental benefits, biophilic design involves a deeper understanding of landscapes, natural materials, and light. Adding native trees and plants can offer numerous benefits to the broader ecosystem, including natural cooling of urban heat islands, pollinator habitats, and stormwater runoff management. These and other biophilic amenities function as infrastructure that can protect human health, safety, and the environment. The proposed biophilic narrative should include specific, measurable details on how the project design will reduce the urban heat island impact as well as meet County goals for tree canopy coverage.

5. Developers should disclose key metrics such as expected utility costs and embodied carbon.

Requiring measurement and disclosure of carbon-related metrics can be an important first step to incentivizing environmentally conscious decision-making. Requiring builders to estimate an occupant's expected utility costs would allow residents and businesses to factor energy costs into their lease and purchase decisions, thus driving developers to offer more efficient systems than they otherwise might, without setting a static requirement in the form-based code. Similarly, disclosure of embodied carbon – the emissions arising from the construction of a building itself – will give developers an incentive to distinguish themselves from their competitors by offering more sustainable construction materials and practices. Developers should provide a narrative on plans for reducing the embodied carbon in building materials and ensuring waste, including from any building deconstruction, is diverted for reuse or recycling.

In addition to the specific additions above, we encourage the Board and County staff to consider ways to incorporate elements of site plan review that may be best considered holistically, putting an individual plan in context with the broader neighborhood environment, such as considerations for tree canopy and stormwater management. These elements may not be suitably addressed by uniform standards for each site, but should nevertheless be carefully considered by anybody engaged in reviewing site plans and negotiating approvals with developers.

It is imperative that the County ensure the updated Columbia Pike Form Based Codes are aligned with the forthcoming update to the Green Building Incentive Policy to reflect the County's priority on designing, constructing, and operating buildings with the lowest carbon footprint that can be achieved considering lifecycle costs. If possible, form-based codes should be tied to external standards and policies that are updated incrementally, so that the form-based code itself does not need to be constantly updated to reflect changing practices. At a minimum, the form-based codes should be reviewed and updated at least every five years to stay current with best practices in the building industry and ensure that they continue to meet County goals and values.

Finally, we suggest revising the charter of the Arlington County Form Based Code Advisory Working Group to incorporate the charge of ensuring that development approved pursuant to a form-based code is consistent with County goals for sustainability, and to include a seat on the working group for an individual with a background in sustainable design.

Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink that reads "Joan J. McIntyre". The signature is written in a cursive style with a large initial "J" and "M".

Joan McIntyre

Chair, Climate Change, Energy and Environment Commission

CC: Sara Steinberger, Chair, Planning Commission

Anthony Fusarelli, CPHD Director

Olivia Sontag, CPHD

Matt Mattauszek, CPHD