Testimony of
Spenser Balog, Sustainable Development Associate, Casey Trees
September 18, 2019

Before the Board of Zoning Adjustment
on
Redevelopment of 2483-2491 Alabama Ave SE
DCOZ Case No. 20110: Alabama Apartments LLC

Good morning board members,

My name is Spenser Balog and I am the Sustainable Development Associate with Casey Trees. Casey Trees is a Washington, D.C.-based nonprofit with a mission "to restore, enhance, and protect the tree canopy of the nation's capital." To fulfill this mission, we plant trees; monitor the city's tree canopy; and work with decision makers, developers, and residents to encourage tree planting, stewardship, protection and research. We are dedicated to helping the District reach its 40 percent tree canopy goal by 2032. As a city, we can achieve this goal with sustainable development projects that protect existing trees and achieve a net gain in tree canopy.

Ward 8 is beginning to see significant development pressure, which is threatening its green space and tree canopy. While we understand D.C. is a growing city and must develop to support that growth, we believe that all D.C. residents should have access to green space and the benefits they provide. We are happy to see a development that is addressing the growing affordable housing shortage, but we believe that the tree canopy that currently exists on-site is too valuable to lose.

The current development plan is slated to remove all existing trees within the site boundary to accommodate the building plans. We believe it is possible to protect many of these trees. The development lot is approximately 61,000 sq. ft. and the tree canopy makes up over 70% of this square footage (Fig. 1). This is the equivalent of one full-sized football field. The trees found within the site boundary are part of a larger 147,000 sq. ft. contiguous patch of mature canopy cover. The development plan would fragment 30% of this larger forest patch and have a significant negative effect on the surrounding community. The site in its current state is the coolest area within a heat island (Fig. 2). While it is cool now, removing tree canopy on this site will make this neighborhood far more susceptible to detrimental heat-related effects. The Skyland community is quickly losing plantable green space as development encroaches on existing tree canopy.

We have a few recommendations that we would like to present to the Board of Zoning Adjustment today. It is not our intention to delay this project or inhibit the development of this affordable housing community, however, we recommend that, before the BZA approves the special exception to construct 86 units on this site, the developers consider the following:

1. Adopt a 40% tree canopy goal. Our analysis shows that the site currently has a 70% canopy cover. The development team could protect 20% of this canopy without altering the building plans (Fig. 3). Many of these trees are close to 60 feet tall and have taken decades to mature.

2. Use advanced tree growth systems to maximize soil volume. Project renderings show trees planted within inner plazas, courtyards and along sidewalks. We recommend installing structural soils or Silva Cells under hardscape to allow trees the ability to stretch their roots and access a greater volume of soil to grow into large canopy trees. Paired with permeable pavement, water-loving trees such as bald cypress or river birch will thrive in raingardens and provide residents with a multitude of benefits

3. Select canopy trees in the landscaping plan wherever possible. The current landscaping plan includes many ornamental bushes, flowering trees and mid-sized conifers. While we are grateful for a diverse landscaping plan, these plants do not provide the same benefits that the existing mature oaks and maples do. Canopy trees provide tremendous stormwater retention, shade and air purification benefits that would be a critical loss when removed. Casey Trees' Urban Tree Selection guide can be consulted as a reference.

4. Adopt a 3-to-1 planting ratio on the future site. Planting 1 tree for every tree removed is commendable, but even this does not account for the survivability of young trees. Planting 3 trees for every 1 tree removed is compliant with the *American National Standard for Tree Care Operations* (ANSI). It takes many years for mature trees to reach their full potential in providing shade and stormwater retention and it is imperative that the development team mitigates their impact on existing trees by ensuring that the site exceeds the integrity of the current level of canopy.

This past June was the Earth's hottest on record, with urban cities experiencing the brunt of these heat effects (Fig. 4). It is our responsibility to D.C.'s residents to plan spaces that mitigate the urban heat island effect, manage stormwater to prevent flooding and provide shade to residents to have places of respite from the summer sun. Protecting the existing large canopy trees will ensure cooler temperatures throughout the site and effectively meet the goals of DC's sustainability and resiliency plans, while beautifying the site and providing mental and physical health benefits to residents.

We look forward to working with the development team and to continue this dialogue on incorporating more trees into the development plan. We believe that adopting these commitments will help to make this community more resilient in the face of worsening climate effects and make Alabama Avenue Apartments a pinnacle of innovative green design.

Figure 1: The removal of all trees on site would have a significant adverse effect on the surrounding community. The trees currently found on-site make up 30% of a larger contiguous patch of mature canopy cover.

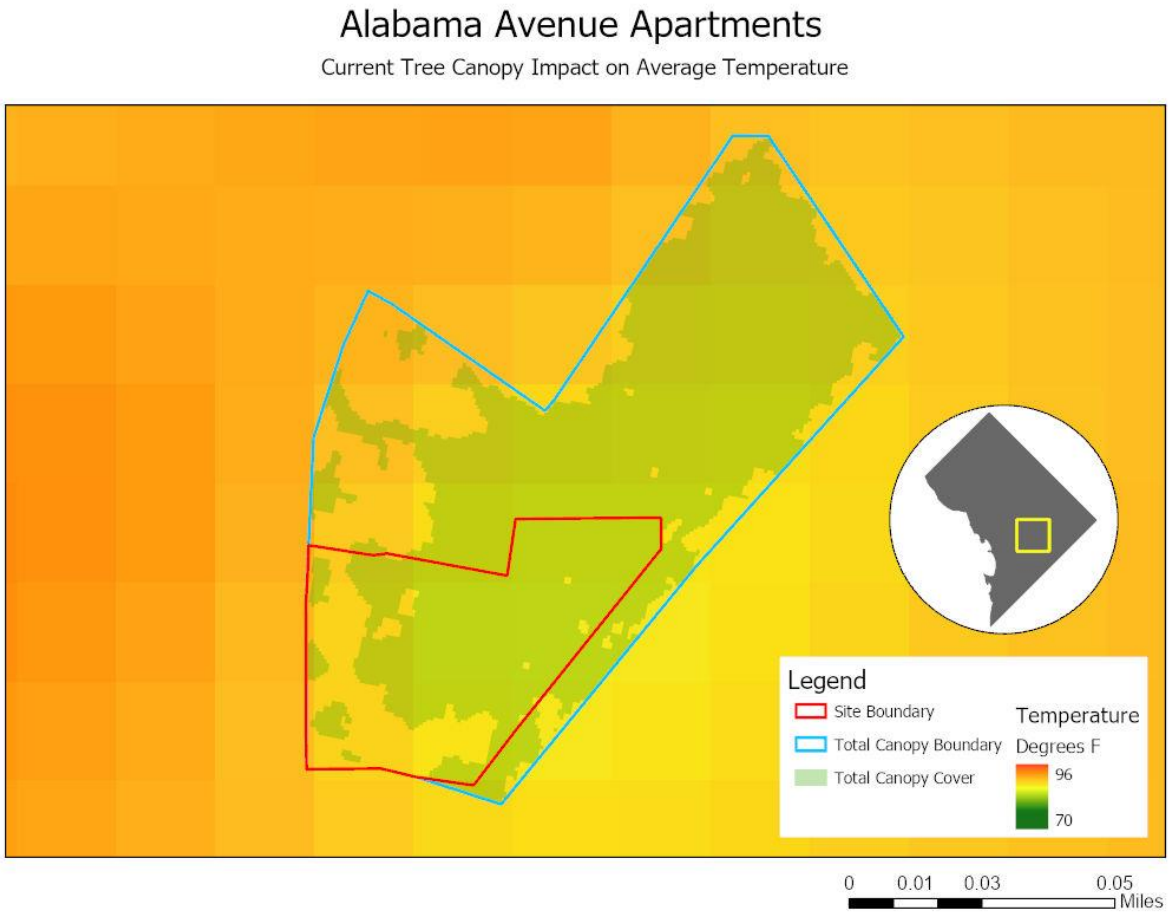

Figure 2: The eastern portion of the development site, where the canopy is the densest, exhibits the coolest temperatures in the surrounding neighborhood due to the cooling effect of these trees.

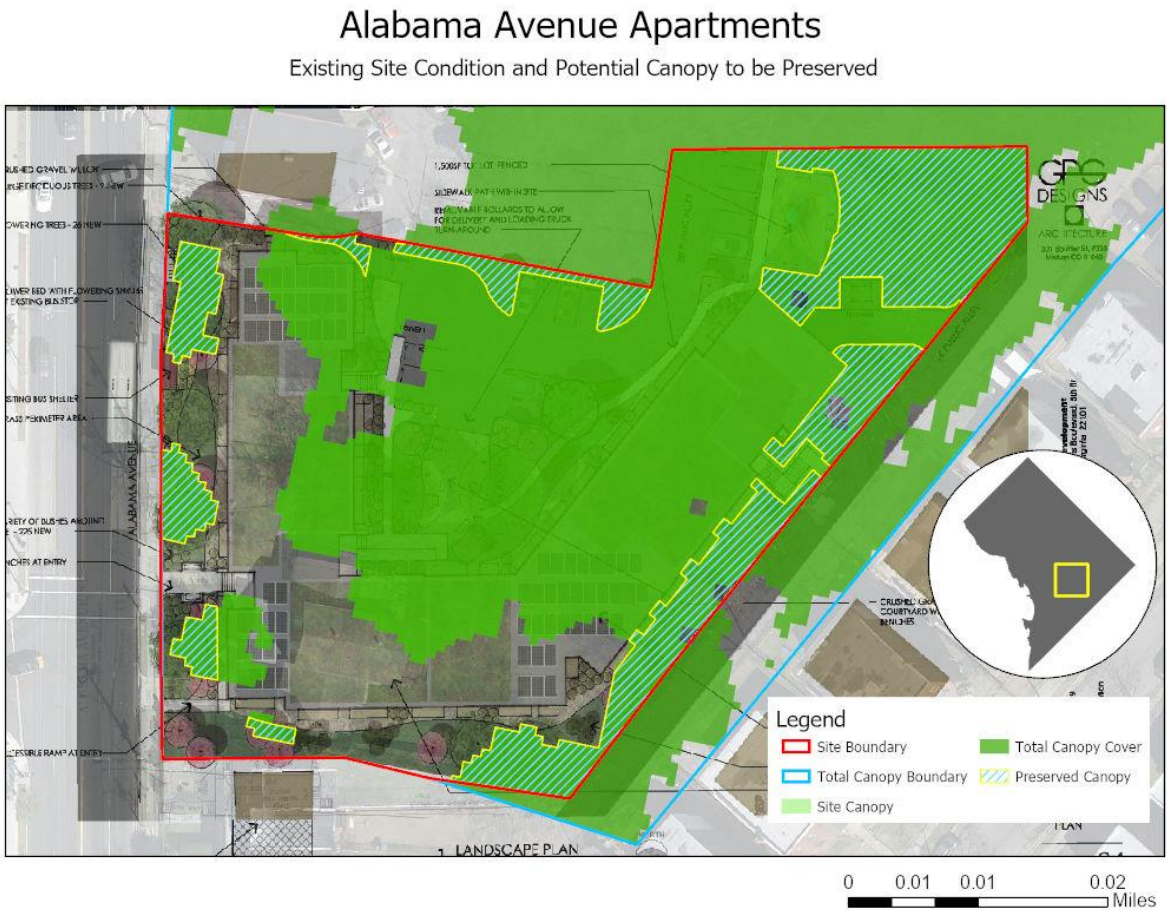

Figure 3: The development team plans to remove all trees on-site to accommodate the development plans. The selected canopy does not interfere with the building footprint and we recommended preserving it to meet our suggested site canopy goal.

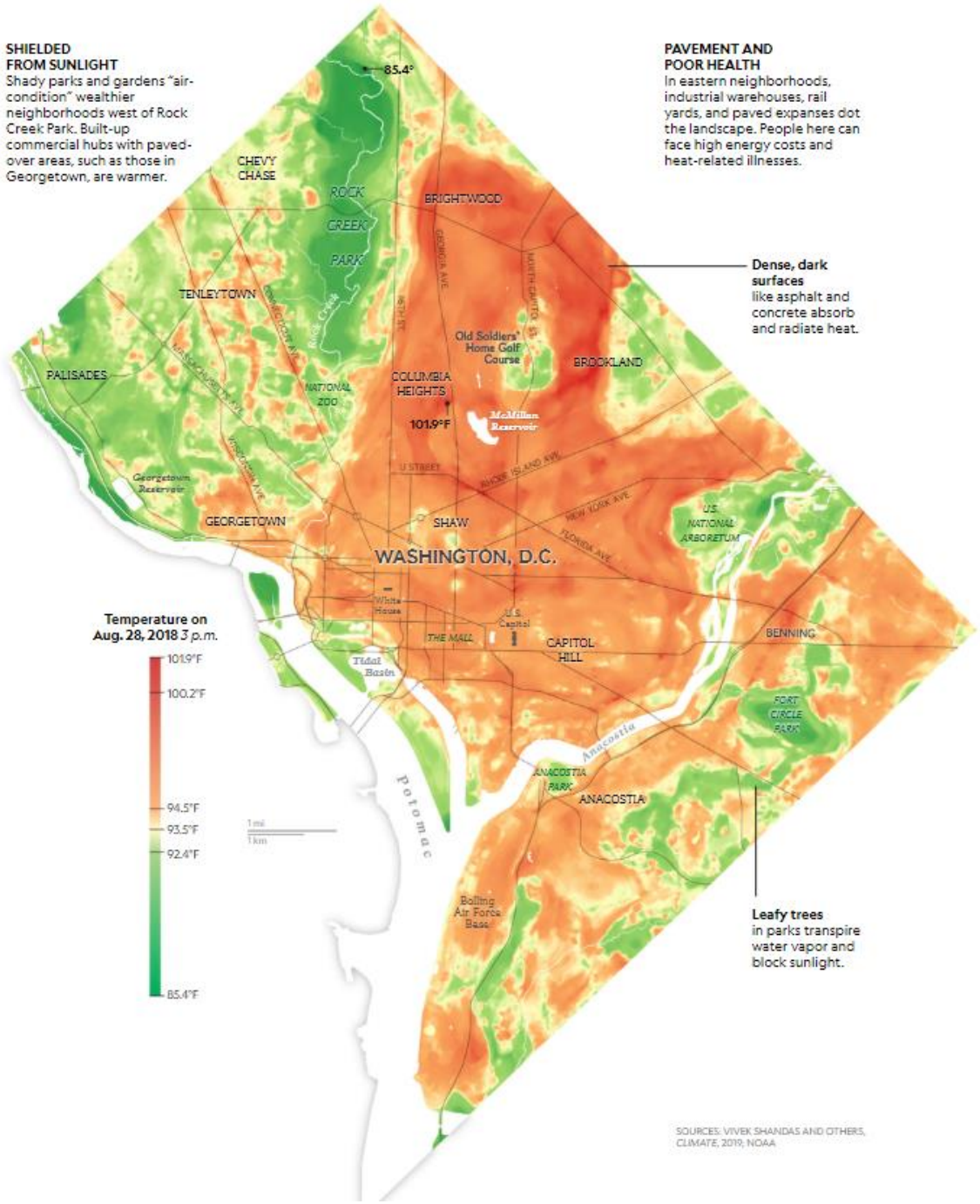

Figure 4: The Urban Heat Island Effect is a phenomenon in which built-up areas are significantly warmer than surrounding rural areas due to the absorption of solar radiation on dark, impervious surfaces. This heat is stored during the day and released at night, keeping these areas warmer for a prolonged period of time.