Maria Broadbent
Director, Department of Neighborhood and Environmental Programs
City of Annapolis
160 Duke of Gloucester Street
Annapolis, Maryland 21401

June 17, 2013

Dear Ms. Broadbent, et al.,

The Annapolis Environmental Commission (AEC) submits the following comments regarding the Preliminary Forest Conservation Plan (FCP) report, Preliminary Grading and SWM Concepts Plan, Priority Forest Clearing Justification, and variance requests for the Katherine Properties and adjacent parcels, prepared by Kenneth R. Wallis and Michael J. Klebasko of Klebasko Environmental, LLC, for Mr. James Eagan of Crystal Spring Development, LLC, of Westport, Connecticut, dated May 22, 2013.

Priority Forest Clearing Justification

Annapolis has very few large blocks of forest left. The area along Crystal Spring Farm Road is one of the last. AEC agrees with DNEP's letter of Sep. 13, 2102: With the exception of physically isolated stands, the entire site is considered a contiguous forest per Natural Resource Article 5-1607 c (ii): "Contiguous Forest that connects the largest undeveloped or most vegetated tracts of land within and adjacent to the site" is a priority for retention and protection. Stand A, part of Stands B, C, D and Stand E are large vegetated tracts within the site, thus a priority for retention, and contiguous to forested tracts off site.

The justification for clearing priority forest appears entirely based on a desire to maximize the profitability of the project. A diminution in value of the profitability of the property by reducing the extent of the development does not in itself create an unwarranted hardship. *Belvoir Farms Homeowners Ass'n v. North*, 355 Md. 259 (1999) (in the context of a variance, an unwarranted hardship is equivalent to the denial of reasonable and significant use of the property); *see also Loyola Federal Sav. & Loan Asso. v. Buschman*, 227 Md. 243 (1961) (it is settled Maryland law that the fact that some use other than that which is permitted under a zoning ordinance would be more profitable than a permitted use is not enough to invalidate a use restriction, if the property can reasonably be used for some purpose for which it is adapted). It is therefore reasonable to require the developer to further modify the project to reduce impacts to the priority forest areas.

The developer compares their current site plan to a prior site plan as part of their justification. This is entirely irrelevant (especially considering that both plans significantly exceed the footprint proposed during the annexation hearings). Current site conditions, as described in the Forest Stand Delineation, are the legal starting point of a Forest Conservation Plan, not a concept plan created before the FSD was submitted and approved.

Preliminary Forest Conservation Plan

Move the CCRC building

In the developers' plan, the CCRC building is placed in the most ecologically important portion of the site (see Fig. 1). AEC strongly urges the city to reject this placement. This building should be moved either to the northeast, adjacent to Forest Drive, or to the southwest, amidst the planned houses. This portion of the site includes much of the highest quality priority forest, dominated by large white oaks, containing wetlands (e.g., Fig. 2), drainage headwaters, numerous specimen trees, few invasive species (primarily along an old road), a diverse forest structure (rated "Good" in the FSD), and high regenerative potential. We measured two representative canopy white oaks in different parts of the stand with diameters at breast height of 18.7" and 17.6", corresponding to a stand age of at least 80 years. The high canopy and dense understory provide excellent forest bird habitat. Forest health is excellent as of AEC's visits from 2011-13, with only occasional snags or downed logs (which actually are important habitat elements). The stand contains numerous oak seedlings, indicating good recruitment and long-term persistence. It serves as essential wildlife habitat and a broad-scale corridor linking offsite forest, as recognized by Anne Arundel County's Greenways Master Plan.

Over 200 bird species have been found on the property, including many interior forest passerines. This is one of very few properties remaining in Annapolis with habitat suitable for these birds. According to Ross Geredien, a professional biologist with expertise in ornithology, some birds of greatest conservation need, according to Maryland Dept. of Natural Resources (DNR)'s list, that have been confirmed breeding at the property include:

- Field Sparrow
- Acadian Flycatcher
- Brown Thrasher
- Eastern Towhee
- Hairy Woodpecker
- Wood Thrush
- Scarlet Tanager
- Pileated Woodpecker

"There are several other species," he wrote, "at least 20 more, on the list that overwinter on or migrate through the property but that do not breed there in the summer. Typically, breeding habitat is the most critical for species conservation, but wintering and stopover areas are important for species as well. Hence the overall value to birds of greatest conservation need is quite significant. A few of the species, like Brown Thrasher, Eastern Towhee, and Field Sparrow, actually are there year-round."

Based on decades of scientific literature, AEC believes that any small fragments of forest retained but surrounded by development and roads are not viable and have little value compared to current site conditions. Not only will the fragmentation created by the CCRC building facilitate invasive species, it will impact breeding birds of conservation concern, which are sensitive to disturbance. Several of the birds on the list above require large areas of contiguous interior (away from edges) forest to breed successfully.

The planned placement of the CCRC building will destroy existing wetlands and impact hydrology by blocking existing surface drainages and replacing forests, wetlands, and permeable

soils with impervious surfaces. Wetlands and hydrology are discussed in more detail in the next two subsections.

Add missing wetland to the maps

At least one wetland, a vernal pool, is not mapped on the FCP, and should be included. The grassy vernal pool in the southwest portion has been observed holding standing water, supports amphibian breeding (Fig. 3), and contains hydric soils (according to a core performed on April 18, 2013). Vegetation is affected by repeated mowing, and a sizeable drainage pipe removes standing water quicker than at the forested vernal pool to the north of it. A 1990 infrared aerial photo clearly identifies this feature as waterlogged.

Protect wetlands and hydrology

The Crystal Spring property has a seasonally high water table throughout much of the site, and contains several acres of functional wetlands. These provide important ecosystem services, including abatement of stormwater runoff, groundwater recharge, and maintaining water quality in Crab Creek and the South River. In addition to the larger intermittent stream that drains through the center of the property to the south, there is also a smaller channel to the west of this stream that provides periodic surface flow from the wetlands in the 80+ year old white oak-dominated stand, and several smaller areas of hydric soils that weren't noted on the consultant's maps. The forested wetlands are likely linked via groundwater flow as well, as most of these soils are permeable sandy loams.

Conversion of the contiguous forest to buildings and parking lots is likely to alter the hydrology of most of the wetlands on site, including the perennially flooded wetland at the south edge of the property, and could scour out the intermittent stream and thereby deliver sediment into the perennially flooded wetland and possibly offsite. Given the large extent of wetlands on site, and the connections between them, AEC believes it is imperative that development not sever those connections nor alter the hydrology of the wetlands, as construction of the CCRC building would do (see earlier subsection). Any development should be carefully planned with preservation of wetland and stream hydrology in mind.

AEC supports functional wetland and stream buffers (generally at least 100 feet, but it depends on surface and groundwater flow), rather than the state regulatory minimum of 25 feet. 25 feet is insufficient to protect against altered hydrology, increased sediment and pollutant input, windthrow, increased solar radiation, invasive species, songbird predators, and other edge effects. Amphibians like spring peepers and wood frogs require contiguous forest to move between breeding sites and feeding areas. AEC requests an analysis by a qualified wetland professional not affiliated with the developer that delineates buffers that will actually protect the wetlands and drainages from negative impacts, and provides additional measures needed to protect existing hydrology and habitat.

Use existing road instead of building new ones

This applies primarily to the proposed road between the townhouse site and the CCRC site, that will cross the intermittent stream and bisect the forest. The destruction and fragmentation this will cause are entirely unnecessary. The existing road (Crystal Spring Farm Road) should be utilized instead, paved and widened as needed, as long as current hydrology is maintained and

other impacts minimized. Doing this will also provide more direct access and construction savings.

Correct the forest stand boundaries

As AEC mentioned in its comments concerning iterations of the Forest Stand Delineation, the forest boundaries are inaccurate in places, and show less contiguity than actually exists. For example, the forest is contiguous across Crystal Spring Farm Road. All you have to do is look up and see that the canopy is unbroken, which meets the normal definition of forest contiguity. Also, the area between Stand A and the forest to the southwest is much more contiguous than depicted on the FSD and FCP. In fact, the narrowest point between these exceeds 110 feet.

Mitigation of environmental impacts

The developers should avoid and minimize negative impacts to the forest, wetlands, hydrology, and other natural resources to the degree possible. Impacts not avoided should be mitigated. To conform with the city's goal of increasing rather than decreasing tree canopy, all forest removed should be replaced at least acre for acre. AEC identified some possible reforestation areas (Figure 1) that would improve forest connectivity and contiguity and help protect Crab Creek and the South River.

The Crystal Spring forest is a significant local carbon sink. If converted as planned, it will become a huge carbon source instead, increasing the city's contribution to climate change despite the goals of its sustainability plan. As the city pledged to reduce rather than increase its greenhouse gas emissions, AEC would like the city to calculate the change in carbon storage and atmospheric CO_2, and recommend measures to mitigate these impacts.

Preliminary Grading and SWM Concepts Plan

The stormwater management plan relies on stormwater detention ponds, a technique now considered obsolete. The State of Maryland now requires Environmental Site Design, as detailed in the Maryland Stormwater Design Manual. Structural practices are to be used only when no other options are possible. In addition, one of the proposed detention ponds (Sheet 4, just south of the proposed CCRC building) will empty into an ephemeral drainage ravine between the forested wetlands across Crystal Spring Farm Road and the intermittent stream. This drainage has steep slopes and fragile soils. Adding additional stormwater will almost certainly erode the sandy soils here.

Variance requests

The developer proposes to remove a total of 27 specimen trees with diameters at breast height of 30 inches or greater. Pursuant to the Forest Conservation Act, such trees "shall be considered priority for retention and protection, and they shall be left in an undisturbed condition unless the applicant has demonstrated, to the satisfaction of the State or local authority, that the applicant qualifies for a variance under § 5-1611 of this subtitle:…" MD. CODE ANN. NAT. RES. § 5-1607(c)(2)(iii). The Act states in § 5-1611 that the "State and local authorities shall provide for the granting of variances to the requirements of this subtitle, where *owing to the special features of a site or other circumstances*, implementation of this subtitle would result in unwarranted

hardship to an applicant. MD. CODE ANN. NAT. RES. § 5-1611(a) (emphasis added). The law provides two guidelines for the development of variance procedures by local authorities. They shall (1) "[b]e designed in a manner consistent with the spirit and intent of [the Forest Conservation Act]"; and (2) "[a]ssure that the granting of a variance will not adversely affect water quality." *Id*. at § 5-1611(b).

The developer's environmental consultant provides its justification for removal of the specimen trees in a letter dated May 28, 2013 and addressed to Maria Broadbent at the City Department of Neighborhood & Environmental Programs. In a fashion similar to its justification for clearing priority forest, the developer appears to focus on an economic basis for its variance request. Specifically, avoidance of all 27 specimen trees would result in an unwarranted hardship "through a significant loss of units and developable area." M. Klebasko Letter to M. Broadbent at 2 (May 28, 2013). As stated above, a mere reduction in the profitability of the property does not on its own result in an unwarranted hardship.

Conclusion

For the reasons stated above, AEC urges the City of Annapolis to reject the Preliminary FCP and associated documents, as detailed above, in favor of a revised version that satisfies these concerns.

Sincerely,

Ted Weber
Chair, Annapolis Environmental Commission

CC: Mayor Josh Cohen, Alderman Joe Budge, Alderman Fred Paone, Alderwoman Classie Hoyle, Alderwoman Sheila Finlayson, Alderman Jared Littmann, Alderman Kenneth Kirby, Alderman Ian Pfeiffer, and Alderman Ross Arnett

Fig. 1. Map produced by Annapolis Environmental Commission (AEC) of priority natural resources on the Crystal Spring property.

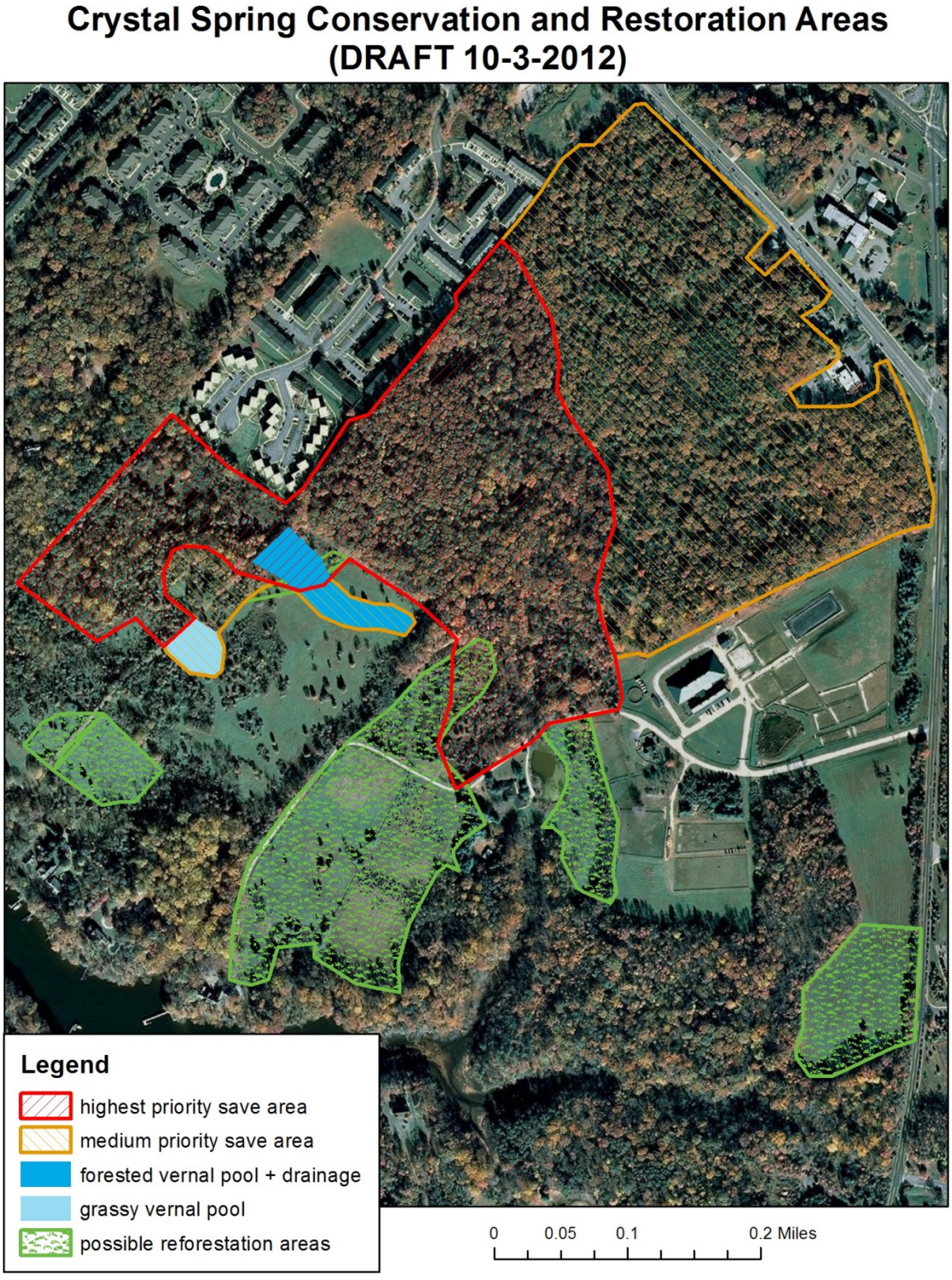

Fig. 2. Forested wetland in “Stand A” (photo March 19, 2011)

Fig. 3. Frog eggs in the grassy vernal pool (photo March 19, 2011)