

Mr. Kovalchik

My name is Zachary Davis. I am a conservation biologist and research ecologist from Colonie, New York. I am writing to you to submit my comments on the proposed development of the Crossgates Hill property. The Albany Pine Bush is a preserve I am well acquainted with, as I grew up in this area, and I carried out various biodiversity assessments throughout the preserve as a Commission employee in the summers of 2016 and 2017. It is my belief that this project will have significant ecological impacts within the proposed project area; the immediate adjacent area contiguous to Pine Bush Property and including non-Preserve property; and the non-contiguous surrounding area which is Pine Bush Preserve--areas which have not been considered in this project's insufficient proposal. More effort and investigation is needed to mitigate these impacts, however I believe this project should be rejected entirely based on its indefinite impacts elaborated on below.

The proposal does not consider the alternative action of preservation of this forest or reversion back in to pitch pine-scrub oak barrens, and its future potential as functioning Karner blue habitat (i.e. the consideration of the action of no action as would be necessitated by an EIS). Despite its previous proximate historical use as a pig farm, and contemporary forest structure, this forest was indeed "Pine Bush" habitat (a notion rejected by the proposing developers). Furthermore, I believe that it is in bad taste, and ecologically unsound to paint all non-pitch pine-scrub oak ecosystem as "not Pine Bush"; this preserve is more than one ecosystem type. Reversion to native pitch-pine scrub oak barrens should prove to be both economically feasible, ecologically important, and aligns more with the Commission's goal of restoration and preservation of this globally significant ecosystem than its indefinite destruction.

The benefit of this reversion carried out by the Albany Pine Bush Commission would be astronomical; parcels of similar size already contribute largely to Karner blue populations. I believe the Commission's decision to forego the partial protected status of this parcel (as suggested by the Commission's management plan) for full protection of the corridor was based in haste and resignation due to the lack of a contemporary EIS, and therefore no consideration of this alternative was given. Decisions based on haste are not ecologically sound, nor toward the mission of the Albany Pine Bush Commission. Due to this, I request an EIS to be conducted with the following considerations, or that the project be rejected before this necessity.

Forest fragmentation has many negative effects on bird populations. These effects are exacerbated by the continuous destruction of already fragmented ecosystems--Guilderland is experiencing ecosystem death by 10,000 cuts. Forested fragments within an urban environment such as this, and are the last bits of habitat residential bird communities have left in many urban areas. The Albany Pine Bush is already designated an important bird area, and I argue that this forest is an important part of that. Birds, especially those of conservation concern not considered in this project's rudimentary assessment, use these islands as stopover locations on migration, a necessary place of rest. A two day survey for birds in this ecosystem is not enough to capture the full use of this forest by species of conservation concern, and breeding habitat is not the only important aspect of a bird's life cycle. Consideration of these islands within the landscape of Guilderland should be given more weight when considering project development; without these

islands, migrations become harder to carry out--survival during migration diminishes. It would behoove Guilderland officials to look through the lens of and at the entire span of Guilderland's fauna when making their decision on project developments, not just through the lens of the developer.

It has been well documented that the effects of fragmentation are far reaching. I believe the buffer zone agreed upon by the Commission will be less than effective, and thus an analysis of the effects of fragmentation induced by this project must be carried out. The effects of both sound and light disturbance has been documented to negatively impact songbird behavior during the breeding season, and a project of this scale will certainly induce negative impacts on its surrounding environment through sound and light pollution. Furthermore, insect mortality in lighted areas is increased by the way of predation when they are trapped at a light source. The problems induced by invasive species will be exacerbated through disturbance indefinitely by carrying out this project, and will prove to be a threat to nearby Karner blue butterfly habitat. Invasives may displace species communities in the surrounding area. For example, house sparrow, European starling, and brown-headed cowbird (all human disturbance related species) populations will increase in the general area, adding pressure to Preserved areas through displacement and competition with species of special concern. This added pressure to the already fragile surrounding ecosystem should be considered when allowing the destruction of this property.

Should this parcel, and therefore ecosystem, be destroyed and multi-story buildings erected, songbirds will experience continuous negative impacts not considered, indefinitely. For example, the effects of window strike induced mortality on songbird populations. Given the Albany Pine Bush is an Important Bird Area and therefore home to numerous bird species of special concern, it can be assumed that those species which use this forest as a corridor during dispersal and migration, if not as breeding habitat as is suggested by the presence of Cooper's hawks (a species of conservation concern). This project will subject these birds, indiscriminately, to window strike induced mortality. This poses a considerable threat to those species as it will indefinitely limit the Pine Bush's capacity to act as a source population for surrounding ecosystems. Barriers to dispersal are a hindrance for bird population conservation. Should this project be carried out, efforts to avoid this must be mandated to avoid this indefinite impact--windows should be equipped with anti-bird-strike technology.

Due to the fact that this project would be an act of further destruction of Albany Pine Bush carried out by a developer whose history is that of Pine Bush destruction, and the Pine Bush is important cultural aspect of our community, more must be done by Guilderland planning officials in the way of conservation education and acknowledgement given for how developments such as these impact our local culture and ecosystems. The "future build site" left out of this proposal (i.e. their attempt at splitting and ignoring the project's future impacts) should be turned in to a pollinator garden, to mitigate the indefinite loss of habitat for our already declining pollinator species, should this forest be destroyed. The hardwood forest tree species which will be destroyed while carrying out this project serves as another blow to this at risk suite of organisms. Signage should be installed to acknowledge the hand that this development had in the destruction of our local culture and natural splendor (similar to the Karner "memorial" which was recently removed

from Crossgates mall) lest future generations deem it acceptable to frivolously continue to destroy our already dwindling biodiversity. Guilderland should not promote this destruction, especially because it is contained within a Pollinator Friendly County. Thus, I reiterate my suggestion, and this garden should be mandated to serve as both ecological and cultural impact mitigation should you not reject this project proposal.

Lastly, when considering this project, I implore you to consider the effects this project has on contributing to climate change. These trees contribute largely to CO2 sequestration, oxygen production, and limit local temperatures. By destroying this forest you will subject locals, which likely chose to live in this area because of its landscape and soundscape, to: decreased air quality; increased temperatures; and continuous sound irritation and the mental health impacts that come along with it. I believe this will diminish the quality of life for locals living near and around the Albany Pine Bush, especially in neighborhoods adjacent to the project area. The environmental health impacts imposed by this project development have not been considered, and I suggest that these impacts are great enough to warrant rejection of this project proposal.

Sincerely,

Zachary Davis,

Conservation Biologist

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