

Grace Nichols
38 Parkwood St.
Albany, NY 12208

Town Planner
Kenneth Kovalchik
Town Hall, PO Box 339,
5209 Western Turnpike,
Guilderland, NY

Dear Ken Kovalchek,

Reviewing previous permits explains some of the original thinking about the protections needed on lands owned by Pyramid and how the NYSDEC sought predict, control and mitigate the effects of development on Pine Bush lands.

In the modified December 10, 1996 SPDES permit -- Crossgates Mall/Hoyts Cinema Expansion Permit #4=0130-00007/00002 states: in Special Conditions, 2nd paragraph: “The Preserve Property shall be preserved and managed for the purposes and functions of preservation, protection and enhancement of Pine Bush vegetation, Karner Blue Butterflies, **their habitat and migration corridor for the KBB and other wildlife to other pine bush lands and KBB habitat sites** as well as buffer for such habitat to land developed and to be developed by adjacent property owners.”

Furthermore it says: “The permittee may not cause nor allow any disturbance, change, physical alteration, modification or in any way affect the preserve property...”

In Section c on that page, it also says “prior to any alteration of adjacent permittee owned or controlled land adjacent to the Karner Blue Hill Preserve, beyond that authorized by this permit,” the permittee must submit plans to the NYS DEC for prior review and if necessary, approval.” Conditions may be placed on further development “to ensure there are no significant adverse impacts on the Preserve

such as changes in vegetation, Karner Blue Butterfly Counts, groundwater regime, air quality or temperature, or impairment of its purposes or functions.”

Section b states that the permittee may not allow public access to any preserve land, presumably including the butterfly migration corridor along the Niagara Mohawk powerline/utility right of way intended to allow migration.

In consideration of this language in this document describing mitigation for some of the take of Karner Blue Butterfly that Crossgates Mall and its expansion perpetrated against a federally endangered species, I believe we are tasked to look at many aspects of impact particularly due to changes to adjacent land.

Some additional impacts on wildlife the Scoping document should include are:

- 1) Impact of Public Access: The scoping document should include a description of the impact of two 5 story high apartment buildings near this important site. The impacts should include tenants walking on the right of way and the children of residents from exploring in these fragile areas, which is strictly prohibited in this document.
- 2) Impact of Pets: A residential community is likely to include pets which will be difficult for Pyramid to police. I want to draw your attention to the literature which maintains that feral cats and outdoor cats are a real threat to wildlife. The impact of pets should be included in this Scope.

What the literature says:

Source: Nature Communications, January 29, 2013 The Impact of Free Ranging Domestic Cats on Wildlife in the United States, by Loss, Will and Marra.

Anthropogenic threats, such as collisions with man-made structures, vehicles, poisoning and predation by domestic pets, combine to kill billions of wildlife

annually. Free-ranging domestic cats have been introduced globally and have contributed to multiple wildlife extinctions on islands. The magnitude of mortality they cause in mainland areas remains speculative, with large-scale estimates based on non-systematic analyses and little consideration of scientific data. Here we conduct a systematic review and quantitatively estimate mortality caused by cats in the United States. We estimate that free-ranging domestic cats kill 1.3–4.0 billion birds and 6.3–22.3 billion mammals annually.

Scientific American's Hannah Waters wrote on January 29 2013, that: *These data are no joke. Domestic cats are on the IUCN's list of the top 100 World's Worst Invasive Alien Species for their ability to decimate prey populations. Those razor-sharp claws strike the hardest on islands, where animal populations are relatively confined. A 2011 review found that, on islands, cats are the primary cause for at least 14% of bird, mammal, and reptile extinctions and the principal threat to almost 8% of critically endangered animals.*

(IUCN is International Union for Conservation of Nature -- the organization that lists species for international conservation status)
Source: Medina F.M., Bonnaud E., Vidal E., Tershy B.R., Zavaleta E.S., Josh Donlan C., Keitt B.S., Corre M., Horwath S.V. & Nogales M. & (2011). A global review of the impacts of invasive cats on island endangered vertebrates, Global Change Biology, 17 (11) 3503-3510. DOI: 10.1111/j.1365-2486.2011.02464.x

3) Impact of light pollution: The current site provides a barrier to light from Crossgates Mall. The Scope should describe the effect of the addition of lighting from a new project on wildlife species moving through the Karner Blue Butterfly Hill Preserve and the migration corridor.

Some Sources on the impact of artificial light at night on crepuscular and nocturnal biodiversity:

<https://onlinelibrary.wiley.com/doi/full/10.1002/ece3.4557> (a 2018 journal article)

http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0085-56262017000100074

There is literature showing the effects of artificial lighting on many insect species, mammals, birds, bats and reptiles. All these should be considered and explored in the EIS.

4) Impact from the imposition of shade: The shade from the buildings into areas usually sunlit in the daytime should be assessed in the Scope. Native lupine and other pine bush plant species depend on the sunlight; Karner Blue Butterflies are also affected by sunlight patterns. The effect should be delineated in the Scope.

5) The sections quoted above bring up the impact of temperature changes: The addition of cement-lined areas with a large parking lot will change the temperature of the area, which is currently covered in trees. Trees have a moderating effect on temperature and humidity. The Scoping document should cover temperature changes which will be caused by the project and any microclimate disturbances.

Thank you for making sure these impacts are added to the Scoping Document and explored in the Environmental Impact Statement.

Grace Nichols,
Member, Save the Pine Bush.