ENVIRONMENTAL COMMISSION

To: Montgomery Township Zoning Board

From: Montgomery Township Environmental Commission

Re: BA-04-23 Renard Management

Date: November 16, 2023

A. Energy Management / Conservation

- 1. The Environmental Commission recommends that the proposed project be designed using LEED standards.
- 2. The Environmental Commission notes the height variance requested for the three-story building. We recommend that the applicant be required to provide solar panels on the roofs of these buildings, as mitigation for the height variance.
- 3. Electric charging stations should be provided for employees and visitors.
- 4. We recommend that all appliances and fixtures should conserve energy and water. We recommend that geothermal heat exchange HVAC be used.

B. Lot Coverage / FAR

1. We do not support variances for lot coverage, but we are pleased to see that the applicant proposes to decrease the total lot coverage, though still not low enough to meet the allowable lot coverage in the Highway Commercial Zone.

C. Stormwater Management

1. Should the Zoning Board decide to approve the variance for lot coverage, we recommend that mitigation should be required for the excess stormwater generated by the development. We recommend pervious pavement, green roofs, downspout planters, rain gardens, additional planting of suitable native trees, donation to the Township's tree bank, or some combination of these. All of these proposed mitigations would decrease the volume of stormwater and reduce flooding.

D. Landscaping

1. The lot in question has a row of six mature pin oak trees growing along its frontage, 30 to 36 inches in diameter, but the applicant proposes to remove them, with no explanation. Are they diseased? Do they interfere with the proposed sidewalk or driveways or utilities? We would be very disappointed to lose those trees.

- a. Oak trees, in addition to being strong, shady, long-lived, and magnificent, are the most valuable trees in New Jersey for wildlife, hosting 513 species of moths and butterflies. Songbirds eat the caterpillars of those pollinators, and feed them to their nestlings. The acorns are valuable food for more than 100 American vertebrate species, including mammals and birds.
- b. There are other trees onsite that the applicant proposes to retain, but we have no clue to their species or even genus, which are not labeled on the plans. We suspect that most of them are invasive species, such as tree of heaven, Bradford pears, and Norway maples. Some may be osage orange trees, which are native in Oklahoma and Texas, but not New Jersey.
- c. The applicant should plant 14 trees per acre plus required street trees and required buffers. The number of shade trees should be 42, excluding the street trees and the evergreen buffer on the east edge of the site. The trees should be shade trees of 2" caliper, and ornamental trees count as half a tree. We don't believe that the applicant has proposed enough trees to meet this requirement. Virtually the whole site would be disturbed, and many trees removed, so the applicant should be sure to meet this number.
 - i. If there is not enough space on the site, the applicant may contribute to Montgomery's tree bank.
- d. We appreciate the provision of native plants in the landscaping plan.
 - i. We are concerned about the Acer Freemanii, a cross between a native red maple and a native silver maple. We have read that in some cases of hybrids of two native species, none of the wildlife that used either plant could use the hybrid. This particular tree produces few, if any seeds.
 - ii. We are also disappointed to see that only two oaks are proposed to replace the six pin oaks presently found along the frontage of the site. The proposed tulip trees host only 20 species of moths and butterflies; perhaps they were chosen to match the tulip tree in front of the bank across the street from the site. River birch (357), red maple (286), American hornbeam (75), white pine (232), and red cedar (57) are all host to numerous moths and butterflies; and American holly, spicebush, and chokeberry produce berries eaten by birds and other wildlife. Blueberries host 277 species of moths and butterflies, but we're afraid the deer love them. We know the birds love them.
 - iii. Please note that the landscape schedule shows one female and one male holly tree, but the plan shows two trees that are the same named variety.

E. Lighting

- 1. The Environmental Commission recommends that the proposed lights should be pointed downwards, shielded from the sides, and as low in elevation and intensity as possible, in keeping with Montgomery's Dark Skies policy. Please be aware that overly bright lights can cause glare and temporarily blind people, reducing visibility; and any lighting may interfere with nocturnal pollinators, fireflies, bats, and migrating birds.
- 2. Yellow light bulbs, which are the least disorienting to wildlife, should be used.
- 3. The lights should be turned off as early as possible in the evening, and the applicant might consider special protocols, such as early closing, or brief shut-offs during spring and fall migration..
- 4. There is a Model Lighting Ordinance jointly developed by the Illuminating Engineering Society and the International Dark Sky Association that provides guidance on developing a lighting plan that will meet the applicant's needs and protect the wildlife that provides us with so vital many ecosystem services, including pollination and pest control. The Environmental Commission requests that your design follow those guidelines. The International Dark Sky Association provides a lot of information on the least harmful yellow lights and on other issues in their website.

F. Traffic and Pedestrian & Bicycle Circulation

- 1. Thank you for proposing a sidewalk, which will be used and will increase pedestrian safety. Is there a bike lane on Route 518?
- 2. We are pleased to note that this application would have low traffic, which would be beneficial to the neighbors.