



MONTGOMERY

TOWNSHIP, NEW JERSEY

ENVIRONMENTAL COMMISSION

To: Montgomery Township Zoning Board
From: Montgomery Township Environmental Commission
Re: The Malvern School BA-07-22
Date: May 16, 2023

A. Site Grading & Design

1. This design will require quite a lot of regrading. The retaining wall on the east side is unfortunate. If the buildings could be built into the slope, a lot of ground disturbance and grading could be avoided.
2. We are concerned about the lack of an off-street loading spot. Route 518 and Brecknell Way will be very busy at rush hour, just the time when children are being dropped off and picked up. Will the parents all park and walk the children in to the building?
3. We see no reason given to grant the building height variance. Shouldn't there be an elevator in the building, for accessibility and for equipment and supplies?

B. Energy Management / Efficiency

1. The Environmental Commission recommends that LEED standards of design and construction be used for this project.
2. Energy-efficient and water-conserving fixtures and appliances should be used.
3. The roofs of the two buildings should have solar panels, or green roofs.
4. We recommend geothermal heat exchange HVAC systems.

C. Tree Planting / Landscaping

1. We expect the tree survey to include the species of each tree located, or at least the genus, and to provide a table of the trees with species and diameter at breast height (DBH), indicating which trees are to be removed. The largest trees shown on the table provided have diameters of 38, 40, and 42", very impressive sizes for any tree.

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2. We are also concerned about the areas around the edges of the site shown as wooded. Once Brecknell Way is constructed and the lot to the east of the proposed school site is redeveloped, most of the trees in the wooded areas may be gone, with only invasive shrubs and vines remaining.
3. The native species proposed for street trees are excellent choices.
4. The Environmental Impact Statement states that the vegetation and wildlife on the site will relocate itself during construction. Leaving out the unlikelihood of vegetation relocating itself, wildlife is also unlikely to survive if forced out, due to existing habitat elsewhere already being used to its maximum extent by other wildlife. In addition, most of the nearby wooded area has already been cleared.

- a. Disease-resistant American elm trees or ball-less sweet gum trees could be used as shade structures in the playground. In the past the Board has required applicants to plant trees in play areas. If there are no trees or shrubs in the playground, what are you teaching the children about nature? You are teaching them that they must not interact with nature, and they do not need nature, and nothing could be farther from the truth.
5. Montgomery's Tree Ordinance requires 14 shade trees per acre, excluding street trees and required trees in required buffers (Township Code Section 16-5.6d.3). Evergreen trees and ornamental trees count as half of a shade tree. It is fairly obvious which trees are street trees, but it is not clear whether the trees along the edges of the site are required buffer trees. Please clarify. If the total is less than 14 trees per acres, the applicant should donate the difference to Montgomery's tree bank as is permitted by Code Section 16-5.6.d.3.b.

D. Stormwater Management

1. The bioretention basin is proposed to discharge water onto the adjacent property, not into a watercourse. This seems to be a recipe for flooding the adjacent property. We do not know whether it is legal or not, but it seems that the Development Review Committee and the Zoning Board would have a responsibility to prevent one property owner from dumping their rainwater runoff onto another property.
2. The basin outflow may exceed the pre-development peak in storms larger than 100 years and smaller than 2 years, and will certainly continue longer than peak runoff under pre-development conditions, resulting in greater likelihood of erosion and flooding.
3. We recommend porous pavement, rain barrels, and rain gardens.

4. The parking lots could be sloped toward the islands, which could be rain gardens, with underground storm drains leading to the bioretention basin.

E. Lighting

- 1 All outdoor lighting should be pointed downwards, shielded from the sides, and be 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 drivers and pedestrians, reducing visibility, and will interfere with nocturnal pollinators, fireflies, bats, and migrating birds. Yellow light bulbs, which are the least disorienting to wildlife, should be used.
- 1 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. Site Amenities

1. We recommend bike racks.
2. Electric charging stations should be provided for employees as well as clients.
3. No idling signs should be posted in the parking area and in front of the buildings explaining the state laws against idling engines. Children should have clean air to breathe, and idling engines produce much more air pollution than cars that are driving.
4. Park benches in front of the school would be a useful addition.