



MONTGOMERY

TOWNSHIP, NEW JERSEY

ENVIRONMENTAL COMMISSION

To: Montgomery Township Development Review Committee
From: Montgomery Township Environmental Commission
Re: Golden-Bison BA-02-22
Date: December 15, 2022

1. Energy Conservation

- a. The Environmental Commission suggests that the project be designed and built with LEED standards. Use of energy and water-saving appliances and fixtures will save the residents money for the life of the structure, as will provision of extra insulation.
- b. The EC usually recommends that solar panels be installed on the roofs of structures, though in this case there may be too much shade. However, while the site is being disturbed for the septic system and the construction driveway, it could be a good time to install an underground geothermal heat exchange heating and cooling system.

2. Justification for the Variance

- a. The applicant requests a variance for total building cover based on several reasons, some of which we find to be bogus.
 - i. There is no such thing as a “technical building cover exceedance.”
 - ii. The existing lot is indeed very narrow, which would be a reason to grant a side yard setback variance, but the applicant irrationally uses narrowness as an excuse for filling in the narrow gap in the existing dwelling. There is no relationship between the narrowness of the lot and the narrowness of the gap.
- b. Also the reason that the applicant gives for why the purposes of the Zoning Act would be advanced by a deviation from the Zoning requirements is specious. Appropriate population densities for the MR Zone are 10 acres, which was determined based on nitrate dilution modeling showing that a lot size of less than ten acres would not dilute the nitrate pollution resulting from one septic system enough to make the well water safe to drink for residents of the Sourland Mountain. One house on 0.457 acres is only allowed because the house is already built and the lot is grandfathered in. It does not promote appropriate population density, and it is not true that there shall be no appreciable detriment to the public good as a result of the proposal.
- c. The request for the lot coverage variance because it is de minimus would have a small environmental impact only if it will not increase the total number of bedrooms in the house, because that would increase the total number of residents and thus the volume of

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wastewater and nitrates generated, and increase the total amount of groundwater used. It is not clear from the application whether the number of bedrooms will be increased from the number existing, but the applicant should provide that information.

- d. Should the Board decide to grant the bulk variance, mitigation for the increased lot coverage should be required. A rain garden or increased tree planting would reduce downstream flooding caused by extra lot coverage. The infrastructure in the Sourland region suffers extensive damage during floods, for example during Hurricane Ida. These mitigation measures would also increase groundwater infiltration, which could help reduce the problems many Sourland residents have with wells going dry.

3. Tree Planting Waiver

- a. The applicant does not specify how many trees they propose to remove on this lot. At least three trees are shown on the Site Plan that are all or partly inside the limits of disturbance. Other trees may not be shown that are smaller than required to be shown on the site plan. There are four more trees shown on the Site Plan that are adjacent to the limits of disturbance which may be damaged or killed by construction equipment or soil compaction. All of these trees should be replaced by equivalent trees, elsewhere on the site if necessary. In addition to the trees to be replaced, another street tree should be planted along the frontage on Zion-Wertsville Road. We recommend a white oak or chestnut oak or swamp white oak tree or willow oak or disease-resistant American elm.
- b. We recommend that all trees and any other landscaping planted by the applicant be native plants (as is required by Township Code Section 16-5.6d.5), to prevent introduction of non-native species to the valuable Sourland ecosystem. Arborvitae is a suitable native tree for screening, but it is heavily browsed by deer, and deer protection should be provided for these trees. Once the foliage is browsed the deer may buck-rub the trunks, potentially killing these required trees. Furthermore, each evergreen conifer tree only counts as a half tree for the purposes of Montgomery's Tree Ordinance, so twice as many arborvitae are required as are proposed.

4. Lighting

- a. The Environmental Commission recommends that any outdoor lights should be pointed downward, and shielded on the sides, in keeping with Montgomery's Dark Skies policy. The lowest height and intensity that would be consistent with safety should be used to protect migrating birds, who visit the Sourland area in large numbers, and nocturnal native pollinators and bats. Amber-colored lights that are on motion detectors are most protective for all those wildlife.