

Township Planning and Zoning Administrator
Lower Makefield Township
1100 Edgewood Road
Yardley, Pa. 19067

November 5, 2020

Re: Pickett Preserve at Edgewood - Preliminary/Final Land Development Plans

Dear Mr. Majewski:

The Lower Makefield Township Environmental Advisory Council (**EAC**) has completed its review of the Preliminary/Final Land Development Plans for the Pickett Preserve at Edgewood.

The base area site of 37 acres will be divided between commercial and residential. On the 23-acre commercial zone there will be 155,000 sq. ft. of retail located in seven new structures and the existing barn and house. One of these new structures will be a Wegmans Grocery Store (100,000 sq. ft.), two will be restaurants, one will be a drive-thru pharmacy, two will be general retail, and one will be a drive-thru bank. The 14-acre residential portion will have 200 apartments dispersed among nine separate buildings. There will also be a club house building.

Impervious surface will cover 63.3% (23.4 acres) of the site. A total of 1,213 parking spots are proposed. There are currently 6.6 acres of woodlands on the site of which 3.3 acres will be removed. The documents review are below followed by our eleven comments.

- Preliminary/Final Land Development Plans, dated Sept. 11, 2020,
- General Project Description and Stormwater Management Calculations, dated Sept. 11, 2020,
- Environmental Impact Assessment Report, dated Sept. 11, 2020
- Transportation Impact Study for the Prickett Preserve at Edgewood dated July 21, 2020

1. Waiver Request from the Tree Replacement Requirement

The Bohler Engineering September 11, 2020 letter to Jim Majewski contains a list of requested waivers for the project. Among the requests is a waiver from the Township's Tree Replacement Ordinance 178-85(H)(4).

Construction of this project will result in the cutting down of 3.3 acres of existing woodlands at the site. It should be noted that the developer was given a "bonus" provision that allows them to remove 50% of the site's woodlands instead of 30%. The bonus provisions result in the clearing of an additional 1.3 acres of woodlands. 353 existing trees greater than 10 inches in trunk diameter will be

removed. As a result, 1,667 replacement trees are required. The developer proposes planting 687 trees on-site (this value includes the required parking lot trees, street trees, and buffer trees. Therefore, there is a deficiency of 980 replacement trees.

Either planting additional trees on-site or depositing \$308,700 into the Township's Tree Bank can address the deficiency. The developer states in their waiver request planting additional trees on-site will not fit the overall design of the project. Therefore, we recommend the \$308,700 be deposited in the Tree Bank.

The money needed to compensate for the removal of trees is small when compared to the \$106,000,000 overall cost of the project (page 613 of the submitted Environmental Impact Assessment). In addition, the developer has agreed to make \$6,500,000 in offsite road improvements to mitigate the impact of increased traffic. For the magnitude of this project, the payment of \$308,700 into the Township's Tree Bank to help mitigate its environmental impact is reasonable.

2. Planting of Non-Native Trees

Sheet C-706. The trees listed as being planted onsite include 29 Colorado Spruces and 20 Norway Spruces, and 16 Siberian Spruces. Per the Township's Native Plant Ordinance (Chapter 178.80), these are non-native species and should be replaced by similar native evergreen species. Native species are readily available and will most likely require less maintenance.

3. Reduction in the Proposed Number of Parking Spots

Sheet C-103 of the development plans indicates there will be **1,213 parking spots**.

The retail side will have 855 parking spots, 83 more than the ordinance requires.

The residential side there will be 358 parking spots, 58 more than the ordinance requires (1.5/unit).

We ask that the proposed number of parking spots be reevaluated to verify they are actually needed. Reducing the number of parking spots will bring positive environmental benefits (reduction of stormwater runoff, improvement of stormwater water quality, ground water recharge, less pavement urban heat island). The land saved by not building the driveways aisles and parking spots could instead be used as common open space. The developer will also benefit because each parking spot can cost thousands of dollars to build.

3.A Conduct a Shared Parking Analysis

200-50.11.C (Parking standards) of the mixed-use ordinance provides methods of reducing the proposed number of parking spots to a value less than the ordinance requirements. One such method is through the submission of a shared parking analysis showing if the overall required number of spaces maybe reduced. We ask the developer submit such a shared parking analysis.

A Shared Parking Analysis would be most appropriate for the retail portion of this development. Many of the parking lots surrounding the retail buildings are in close proximity to each other. The types of retail planned (super market, pharmacy, restaurants, bank, etc.) may have different peak use periods allowing for shared parking.

3.B Consider Reserve Parking

200-50.11.D (Parking standards) of the mixed-use ordinance allows the applicant to place up to fifteen (15%) percent of the required parking may in reserve. This reserve parking could later be built if, after Wegmans, the retail stores, and apartments are open, there's an issue with adequate parking.

Below are reasons why all the proposed 855 retail parking spots proposed may not be necessary.

- One of the purposes of a multi-use development is for the residents living there to have the ability to walk to the nearby commercial establishments. It is reasonable to assume people in the 200 apartments (and the Flowers Field at Edgewood) will often walk and not drive to Wegmans, the restaurants, and other retail establishments. Therefore, they won't need parking spots.
- With the rise of on-line shopping, the number of customers visiting the brick and mortar stores is diminished as the compared to the past.
- Among the proposed retail buildings will be a drive-thru bank and pharmacy. Customers utilizing the drive-thru will not require on-site parking.
- Wegmans may not need all 500 Parking Spots the Mixed-Use ordinance allows for a 100,000 ft² super market (5 parking spots per 1,000 ft²). The findings of the study below suggest fewer parking spots will be needed.

The Planning Division of Monroe County in Rochester NY released a study entitled "Statistical Analyses of Parking by Land Use" (Aug. 2007). The purpose of the study was to obtain accurate parking data for analysis to determine parking ratios for various land uses. One of the land uses evaluated were supermarkets.

18 different supermarkets in the area around Rochester NY of varying sizes were surveyed. Rochester is home of Wegmans Corporation and there are many of their stores in the area that were no doubt included in the survey.

The studies conclusion regarding parking at supermarkets:

“The increasing size of supermarkets does not reflect a commensurate increase in peak parking demand. The observations suggest that the rate of peak parking demand tends to flatten out with increasing gross floor area. Thus, a parking rate of 1 space per 200 ft² (note; equivalent to the LMT ordinance) may be reasonable for supermarkets in the 20,000 ft² range, but excessive for supermarkets with 100,000 ft².”

The study goes on to recommend the following number of parking spots for supermarkets greater than 90,000 ft²; 325 spaces plus 1 space per 500 ft over 90,000 ft. It goes on to say this rate should still allow sufficient parking spaces for holiday shopping loads.

- If this study’s criterion is used, the number of parking spots Wegmans needs is **345 parking spots**, not the 500 required in the ordinance.
- Low Impact Development would require that the number of parking spots built should not be based on the one day during the year with highest demand. As readily observed in most of this area’s existing large parking lots, many of the parking spots will remain unused for the other 364 days of the year.

If the reserve parking spots are in fact not built there will be the positive environmental benefits and cost benefits discussed earlier.

4. Pervious Pavement Parking Spots

A total of 23.6 acres of impervious surface is proposed at the site. Much of this impervious surface will be the 1,213 parking spots and their driveways. In order to reduce this very large amount of impervious surface, the developer should consider the use of pervious pavement for some of the proposed parking spots.

There are numerous environmental benefits if pervious pavement is used; including a significant reduction of stormwater runoff, improvement of stormwater runoff water quality and temperature, and ground water recharge. The Infiltration Testing Summary Table on page 66 of the Stormwater Management Report shows that there are many locations onsite with adequate soil infiltration that would be ideal for pervious parking spots.

5. Cooler Pavement Strategy to Lower the Urban Heat Island Effect

There is research that suggests in wetter climates pervious pavement reduces the parking surface's urban heat island impact (see page 6-54 of the Federal Highway Administration's document "Towards Sustainable Pavement Systems" at:

https://www.fhwa.dot.gov/pavement/sustainability/hif15002/chapters/hif15002_06.pdf

Using lighter-color paving materials, such as concrete as opposed to traditional asphalt, can also mitigate the heat island effect of pavement. The higher solar reflectance of concrete causes the less heating of the pavement. These and other cool pavement technologies should be explored as part of an effort to reduce the development's heat island.

6. Height of the Main Clock Tower

The drawings show the southwest corner of the Wegmans building will have a 80 ft above ground-level clock tower with a 4 ft-9 in spire on top. This is significantly higher than the 50 ft height limit of other building structures in the Township. Depending on the location, this 80 ft clock tower may appear even higher to the observer. For example, at the development's main entrance/exit on Stony Hill Road the ground elevation is 14 ft lower than the Wegman building. Therefore, for an observer entering the development the clock tower will appear to be 94 ft in height.

A clock tower of this height may be out of character and inconsistent with the land use and the scale of building heights in the area. It may be a large visual interruption to the views in the surrounding landscape. A GIS viewshed analysis of the site after construction showing how the clock tower will appear from different viewpoints in surrounding area.

7. Clock Tower Signs

Will signage be allowed on the two clock towers at the Wegmans?

8. Electric Vehicle Charging Stations

Electric Vehicle charging stations should be considered for both the commercial and residential parking areas. We did not note any in the drawings. Not only would this be good for the environment, but would be a draw for retail customers and apartment tenants. There are also financial incentives available from PECO, Pennsylvania, and the Federal Government for doing so.

9. Green Building Technologies and Sustainable Building Construction

One of the purposes and intent of the Mixed-Use Overlay District is to encourage the use of green building technologies and sustainable buildings (§200-50.5F). None of the bonus provisions in the ordinance related to these were taken. Will there be any examples of green building technologies or sustainable building practices (ex. LEED certification) applied at this development?

TRAFFIC ISSUES

Traffic congestion increases vehicle emissions, degrades ambient air quality and increases noise levels in the area. It also results in greater fuel consumption and energy use by the vehicles. It is therefore of environmental concern.

10. Recalculation of the Development's Trip Generation with the New Data Available

The latest Transportation Impact Study (July 21, 2020) generated traffic for the 55,000 ft² of retail using a generic Shopping Center land use. The Preliminary/Final Land Use Plans submitted provides more detail on the exact types of businesses that will part of the project. With this information the ITE *Trip Generation Manual's* allows for the recalculation trip generation for the specific types of retail proposed. A more accurate trip generation value can then be generated than that using a generic Shopping Center land use.

The Preliminary/Final Land Use Plans submitted show that the 55,000 ft² of retail will consist of a 7,500 ft² restaurant, a 10,200 ft² restaurant, a 13,111 ft² drive-thru pharmacy, a 3,000 ft² drive-thru bank, 18,050 ft² of yet to be specified retail, and 3,089 ft² of office space at the existing house. The type of restaurant (high quality, high turnover sit-down, or fast food) and whether either of the restaurants will have a drive-thru this should be accounted for.

The ITE Trip Generation Manual using the latest tenant information available since should recalculate the number of trips generated by the development. If this new data shows a significant increase in the development's trip generation, the level-of-service (LOS) analysis for all the surrounding intersections should be redone.

11. Congestion at the Yardley-Langhorne/Stony Hill Intersection

In Appendix N of the July 21, 2020 Transportation Impact Study and level-of-service (LOS) was done for the Yardley-Langhorne/Stony Hill Intersection. This analysis showed intersection currently has an overall LOS of F on Saturdays. The LOS at the intersection then improves in the 2023 from a LOS of F to D. This improvement occurs even though approximately 300 more vehicles per hour are traveling thru the intersection on Saturday in 2023.

What change in the intersection will cause the improvement between now and 2023?

Appendix N contains drawings of a proposed traffic light system at 3 intersections along Stony Hill Road (Yardley-Langhorne, Cardinal Road, and Heacock Road). The Township reviewed this plan, identified as permit # 61-1540, in 2017. Is this the change at the intersection that will improve the LOS in 2023? If so, what assurances does the Township have it will in fact occur?

Thank you for your attention to this matter. We ask that these comments be passed on to the applicant and request a response from them to these concerns and suggestions.

Sincerely,
LMT EAC

C: LMT BOS