May 12, 2023

Jim Majewski Community Development Director Lower Makefield Township 1100 Edgewood Road Yardley, Pa. 19067

Re: Preliminary Land Development and Major Subdivision Plans for the Estate of Harry M. Torbert, 1700 Yardley-Newtown Road (SR-332)

Dear Mr. Majewski,

The Lower Makefield Township Environmental Advisory Council (EAC) has completed its review of the Preliminary Land Development and Major Subdivision Plans for the Estate of Harry M. Torbert (parcel No. 20-016-011).

Located at 1700 Yardley-Newtown Road, the 106 acre site is zoned R-1 and currently being used for agriculture and equestrian activities. There is a farm house and various storage/barn/equestrian structures located near the center of the property. There is another existing home in the southeast corner of property. All these structures will be demolished as part of the development.

A total of 78 new single family homes are proposed. Lots will range from 1.0 to 2.16 acres in size. Other than 1.2 acres of 8-15 % steep slopes, the site has no other natural resource protected land such as wetlands, wetlands buffer, watercourses, woodlands, or ponds. There are very few trees on-site.

This review covered the following submissions by the applicant:

- Preliminary Land Development and Major Subdivision Plans for the Estate of Harry Torbert, Sheets 1 thru 125, Dynamic Engineers, March 31, 2023.
- Post Construction Stormwater Management (PCSM) Plan Narrative (Dynamic Engineering, dated March 2023) and Overall PCSM Plant, Sheets 1 – 13 (Dynamic Engineering, dated March 31, 2023)

Below are the EAC's comments on the submitted plan.

1. Loss of Torbert Farm's Contribution to the Township

Problem - As proposed, this development will convert the entire 106 acre farm to a residential development. The Torbert Farm is one of the last remaining large farms in the Township, the other two being the Patterson Farm and Wright Farm. The Torbert and Patterson Farms created a scenic gateway into the Township. Development of the Torbert Farm will result in the loss of a significant contributor to what remains of the Township's rural characteristic. The Torbert Farm is the largest remaining unprotected open space property in LMT. This development will also result in the loss of a significant amount of high quality agricultural land. The United States Department of Agriculture designates the quality of Pennsylvania farmland soils. Among these designations are "prime agricultural soils" and "farmland of statewide importance". Over 80 percent of the site's 106 acres qualify as either prime agricultural soils or farmland of statewide importance (soils at the site classified as CbA, DuA, DuB, LgB, LKA or PbN).¹

Per LMT Ordinance 178 – Attachment 15.B.3.d(1)(c), the following must be submitted as part of the project's Environmental Impact Assessment (EIA) Report:

The applicant shall also discuss whether the on-site soils are considered to be prime agricultural soils or soils of statewide importance as identified by the United States Department of Agriculture, and if these soils exist, how continuous areas of these soils are to be preserved through the design of the project (i.e., clustering and preserving open space).

A discussion of the on-site prime agricultural soils or soils of statewide importance has not been provided in the submittals and there is no proposal for preservation of continuous areas of these soils (i.e., clustering and preserving open space).

Solution #1: LMT's Farmland Preservation Zoning Ordinance

Applying the Farmland Preservation Ordinance 200-17 would preserve 51 percent of the property as farmland (54 acres). This land would be dedicated to the Township's Farmland Preservation Corporation. The remaining portion of the property (52 acres) could be developed as residential.

As proposed, the minimum size of the 78 home lots is 1.0 acres. Most lots are between 1 and 1.2 acres, but some are as large as 2.16 acres. Use of the Farmland Preservation Ordinance would allow a similar number of homes. However, the lots would be smaller. The <u>minimum</u> average lot size allowed is roughly 0.5 acres in size but could be somewhat larger. Lots in the range of 0.5 - 0.75 acre in size are consistent with other existing residential neighborhoods in the area. A smaller area of development would also result in lower infrastructure costs (new roads, stormwater management, etc.), a benefit to the builder.

Solution #2: LMT Vote on Bond for Purchase of the Farm

Let the voters of LMT decide whether this property is worth remaining open space. The November 7, 2023 election could include a ballot measure on a bond that would fund the Township's purchase of the farm. A \$7.5 million bond issue for open space was approved in 1999 receiving over 70% of the votes. The

¹ Sheet 3 of the Preliminary Land Development and Major Subdivision Plans and <u>https://efotg.sc.egov.usda.gov/references/public/LA/Prime and other Important</u><u>Farmland.html</u>)

Township could negotiate with the current owners on a reasonable purchase price prior to the vote.

The land purchased would preferably not include the approximately 15 acres of land and buildings at the center of the property used by the Cambria Stables. This property could be retained in private ownership for equestrian use. The other existing buildings in the center of the property that could be used by a farmer would be retained. The house, built in 1925 and remodeled in 1956, has no significant historical value and could be demolished. The other existing home in the southeast corner of the property could be sectioned off and sold.

To help offset the purchase cost, the Township could request that the Bucks County Agricultural Land Preservation Program purchase a conservation easement on the property. Up to \$12,000 per acre could be paid by Bucks County for that easement. This was recently done at Patterson Farm. Additional funding using Pennsylvania farmland preservation grants could be explored.

2. Improve the Proposed Stormwater Management System

Problem – Almost all stormwater runoff from the developed site will flow into two large infiltration basins. Stormwater from the northern half of the property will be routed to the 1.2 acre Basin A via a series of inlets and piping. The proposed 1.8 acre Basin B will receive stormwater from the southern portion of the site via a series of inlets and piping.

The Pennsylvania DEP recommends specific loading ratios when infiltration basins are designed so that they avoid failure. Overloading is the most common reason for failure of an infiltration basin. The loading ratio is determined by comparing the drainage area to the infiltration basin area. The Pennsylvania DEP's BMP manual recommends a loading ratio of 8:1 for overall tributary area being drained to the infiltration basin's area and a 5:1 ratio for the tributary area's total impervious surface to the infiltration basin's area.

Both basins are far above both the recommended ratios:

Basin A has a ratio of 35:1 for total tributary area and 8.6:1 for impervious area. Basin B has a ratio of 29.6:1 for total tributary area and 7.3:1 for impervious area.

Solution: Adding rain gardens

Adding rain gardens throughout the site will both address the infiltration basins loading ratio problems and provide for an improved stormwater management plan. Capturing the stormwater runoff and infiltrating in the rain gardens will significantly reduce the area of land draining to the two basins and therefore reduce the unacceptable loading ratios. It will also improve groundwater recharge at the site and reduce pollutant loads into Bucks Creek. As a benefit to the developer, it will

reduce costs by reducing the size of the infiltration basins and the required piping needed to convey the stormwater to the basins.

Potential sites for the rain gardens include low points in the backyards between the homes on the eastside of Road A and the westside of Road E, low points in the backyards between the homes on the eastside of Road E and the westside of Road D, and low points in the backyards between the homes on the eastside of Road D and the westside of Road C. In some cases, the rain gardens would also serve as a visual buffer between the homes.

The Project Leader for this evaluation is EAC Member Alan Dresser. Thank you for your attention to this matter.

Sincerely, LMT EAC

C: Dan Grenier, BOS Andrew Pockl (RVE) LMT EAC