

**SEWER AND WATER FEASIBILITY REPORT**

**BRYN COED FARMS  
WEST VINCENT TOWNSHIP  
CHESTER COUNTY, PA**

**NATURAL LANDS TRUST**

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## **SEWER AND WATER FEASIBILITY REPORT**

### **Project Overview**

Natural Lands Trust (NLT) proposes to purchase the lands known as Bryn Coed Farms (+/- 1,500 acres) in West Vincent Township, West Pikeland Township, and East Pikeland Township, Chester County, Pennsylvania. As part of the project, NLT proposes a preserve area (+/- 440 acres), the transfer of +/- 72 acres to West Vincent Township for a park area and sale of the remaining lands for single-family detached dwelling lots. All residential lots will be serviced with individual, on-lot water and sanitary sewer facilities.

The following narrative was prepared as part of the preliminary/final plan submission requirements, detailed in West Vincent's Subdivision and Land Development Ordinance, Section 403.I.1.

### **Narrative**

The residential lots associated with the Bryn Coed Farms project will be serviced by individual, on-lot wells and will also have individual, on-lot sanitary sewer systems. Given the large lot size and small residential density/yield for the project, design and construction of community and/or public water and sanitary sewer facilities is not practical. Additionally, there are not any existing public water and/or sanitary sewer facilities close enough to the project are that would make connecting to such facilities feasible, mostly because making such connections would be cost prohibitive.

While the specific locations for these facilities will be determined during the building permit application phase for each lot, it is anticipated the proposed lot sizes provide for adequate siting of these facilities within suitable areas on each lot. For this initial plan application, lot lines are being modified and new lots are not being created, therefore, Act 537 Sewage Facilities Planning approval is not required. Moving forward, as part of the subdivision process, when lots are created, Act 537 Sewage Facilities Planning approval will be pursued for each individual subdivision.

As part of the building permit application process, each individual lot will submit the applicable well permit and sanitary sewer system design permit applications based on the programming for that specific lot. From a geologic perspective, the site is underlain by the following geologic units, listed in order of magnitude present on site, from highest to lowest: Graphitic Felsic Gneiss, Banded Mafic Gneiss, and Felsic & Intermediate Gneiss. Based on Table 4 of the Geology, Hydrology, and Ground-Water Quality of Chester County, Pennsylvania, by Ronald A. Sloto of the US Geological Survey, dated 1994, records within the county note the following yields for domestic wells within these units:

- Graphitic Felsic Gneiss (total of 65 wells): Min, <1 gpm, Max. 150 gpm, Median 9 gpm.
- Banded Mafic Gneiss (total of 17 wells): Min. <1 gpm, Max. 100 gpm, Median 18 gpm.
- Felsic & Intermediate Gneiss (total of 89 wells): Min. <1 gpm, Max. 314 gpm, Median 12 gpm.

Based on the above data and the size of the parcels, it is anticipated that individual wells for each parcel will be possible, which yield the Township's minimum yield rate of 1 gpm.