



February 12, 2016

ENVIRONMENTAL AND COMMUNITY IMPACT ANALYSIS

Natural Environment

Air and Noise Pollution -- The Ridings is a proposed 39 lot subdivision and is such is not a development of such scale as to create significant noise and air pollution from traffic. There will be some unavoidable noise and air pollution from normal road and house construction but this will be normal for this construction and Town limits on hours of construction will be observed to not burden abutters. After construction there will be no significant noise or air pollution from the new residents.

Stormwater -- With the exception of some very small areas, the entire site drains to the south to the Massachusetts Turnpike right of way. In the Flexible Plan development, most of the site's drainage will be directed into a large infiltration basin south of Road A and located in very permeable soils. In addition, 23 out of 39 proposed homes will direct their roof runoff to a dry well or other infiltration structure. We will submit a Drainage Report demonstrating that the proposed construction will not increase the peak rate of flow of runoff to abutting properties.

Land -- We have already conducted official soil tests sufficient for the design of individual septic systems on all 39 lots proposed in the Flexible Plan.

Plants & Wildlife -- There is a priority habitat area, PH 487, at the northern boundary of the site, though this area is centered north and west of this property. As part of the Natural Heritage and Endangered Species Program's (NHESP) pre-filing consultation policy, we contacted Brent Powers of NHESP and showed him our proposed Flexible Plan development. While his informal judgement is not binding, he indicated to us that NHESP would likely not consider that plan to be a taking of habitat area.

Water Supply -- Using Title V sewage flow generation rates, which are very conservative, and ascribing a typical 20% greater water supply usage, we arrive at a daily use of 20,592 gallons per day by the 39 lots which demand we think the Grafton Water District has sufficient capacity to serve.

Sewage Disposal -- All 39 lots will be served by individual septic systems. We have already conducted the necessary official tests for the 39 lots in the Flexible Plan configuration of the development.

Man-Made Environment

Existing Neighborhood Land Use – The entire surrounding area consists of existing single family homes. This area is all zoned R-40 and the proposed development of single family homes is a use by right in this zone. The project is compatible with the neighborhood.

Zoning -- The project site is located in the R-40 zoning district as are all its abutting properties. In this zoning district single family homes are a use by right.

Architecture -- The proposed homes will be built in a custom colonial style similar in architecture to the homes the applicant has built in the nearby development in Westborough.

Public Services

Schools -- 2010 Census data says that the average family size in Grafton is 3.13 persons. Assuming that each of the 39 homes will be owned by a family and not a single person, that would make approximately 1.1 children per household. There could be some single mothers or fathers, also. That would mean approximately 43 children. The majority of these would initially be elementary school age at the completion of the project with this initial cohort aging and becoming predominantly secondary school age after several years. Some of these students would be sent to private schools thus incurring no load upon the municipal school system.

Police -- The residents of the proposed development will likely be such that their average income is greater than the Town average and as such anticipated need for police manpower is not significant.

Fire -- The proposed development will be served by fire hydrants at prescribed intervals and new construction will follow existing building codes. No unusual demands upon fire services beyond those normal for single family homes is expected.

Recreation -- The proposed open space parcels will be available for walking and passive recreation and are expected to join with other dedicated open space land to the northeast of this site to create a larger contiguous wildlife corridor.

Solid Waste Disposal -- The solid waste generated by this project, upon completion, is expected to be normal residential waste. The residents will observe the same sorting and recycling protocols as other residents of Grafton.

Traffic -- A Traffic Report was prepared for this project by Conley Associates. It finds that the traffic generation of this project will not decrease the levels of service observed at intersections surrounding the project.

Highway -- No service improvements, new lighting, lane provision or striping or new signage will be required as a result of this project. If construction vehicles cause damage to Adams Road, the applicant will make repairs. No unusual costs are expected for road maintenance or drainage system maintenance of the project.

Aesthetics

Lighting -- The applicant will abide by the Board's decision as far as how much, if any street lighting is to be provided and the height and style of the lights.

Landscaping -- The applicant has created tasteful landscaping surrounding the homes he has built in the nearby development in Westborough and intends that the landscaping at these homes, in Grafton, be of similar type and quality.

Visual -- There are no outstanding vistas interrupted by the proposed development. The applicant will work with abutters where visual buffering is desirable. It should be noted that the Flexible Plan development that the applicant prefers already prescribes that open space parcels buffer existing residences from new lots.

Planning

Both the preferred Flexible Plan development and the conventional subdivision are consistent with the Zoning By-law. The type and scale of this development is not such as to incur impacts which affect Town land use policies.

Cost/Benefit Analysis

These calculations are notoriously difficult as the benefit to Town businesses from a larger customer base is extremely difficult to quantify. Based on a simple analysis performed for another project we might expect initial costs of \$1,500 to \$2,000 per home. But one time fees would outweigh these costs during the course of construction.