

WCC DRC members present: Jean Pillo, Lee Wesler

RE: #07-18-13 Crystal Pond Road Subdivision

The applicants, Stephen & Lorraine Gabriele are seeking to develop parcel M-B-L 6365-39-39F into a multifamily development. Their proposal is seeking to construct several structures, including a duplex 4 bedroom home, a garage with an accessory apartment, a second garage, four cottages and a pavilion on 13.3 acres. This development, as proposed, will require the installation of 6 separate septic systems clustered in the center of the property and a community well to service all the structures.

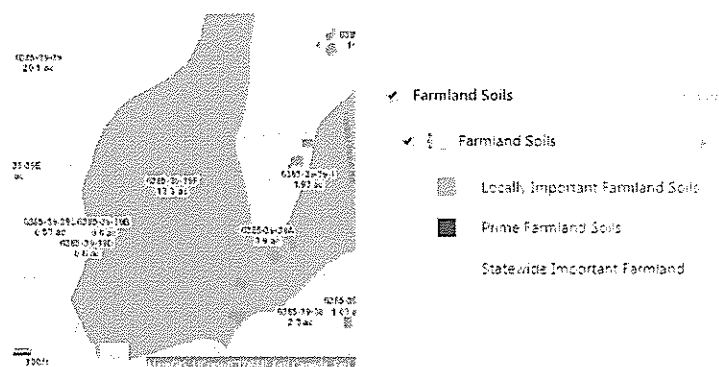
Site Conditions:

Current land use: The current condition of the parcel is a farm field most recently used for hay production.

Class AA Watershed: The entire parcel is within a Class AA drinking water surface watershed for the Windham Water Works.

Surrounding land use: The parcel has approximately 500 +/- feet of frontage along Crystal Pond along its southern boundary. Properties to the east and west of this parcel are developed for residential uses. Across a gravel driveway along the northern border of the parcel, is a property owned and managed by The New Roxbury Land Trust. This preserved open space is a 20-acre wooded property referred to as the Kenyon Woods Preserve. In some towns, a waterbody such as Crystal Pond would be included as unbuildable open space. Across Crystal Pond is Crystal Pond Park, jointly owned by the Towns of Woodstock and Eastford. Adjacent to Crystal Pond Park are three contiguous properties that are permanently protected as open space.

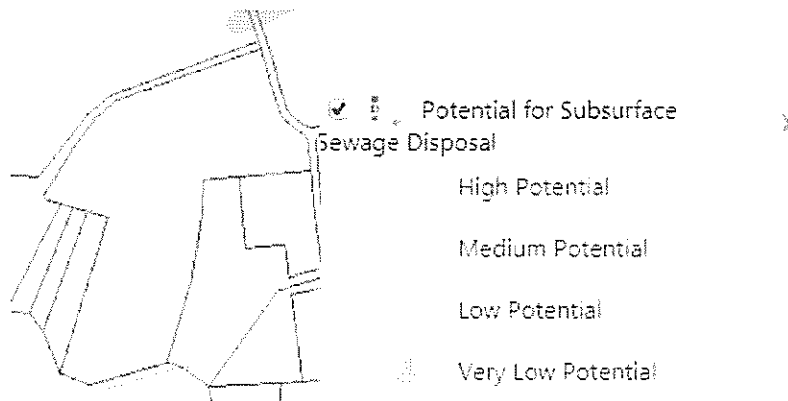
Agricultural soils: The parcel contains approximately 60%+ of Prime Agricultural Soils. (source: NECCOG GIS)



Topographic and wetlands information: Based on the limits of the GIS data, the parcel does not appear to have wetlands, but does share a border with Crystal Pond. The part of the parcel where the development is proposed slopes towards Crystal Pond. The slope of the land is approximately 6%.

Soil Erodibility: Soils are categorized as thin till not rated as susceptible to erosion by the Connecticut Environmental Conditions online GIS mapping data.

Septic Suitability: The soils where the proposed development is situated are rated high septic suitability.



Source: Connecticut Environmental Conditions online

Bioscience: The southern boundary of this parcel is under a Natural Diversity Database Blob indicating the a species either Endangered, Threatened or of Special Concern may be impacted by a landuse change. The applicants maps show minimal trees in the riparian area along Crystal Pond. This is confirmed from the aerial view of the parcel.



Source: Connecticut Environmental Conditions online

Conservation Priorities:

As outlined in *A Plan of Open Space and Conservation*, this parcel has multiple high value resources on it: Prime Agricultural Soil, Drinking Water Watershed Land, rare species, potential wildlife corridor, and the water quality Crystal Pond, an important recreational asset to the towns of Woodstock and Eastford.

Recommendations:

1. The Conservation Commission noted that application #07-18-13 Crystal Pond Road Subdivision and Special Permit does not show any proposed lot line changes in the parcel and is uncertain if this is a subdivision application, or just a special permit application for a multifamily development.
2. In a PowerPoint document dated 2/13/2020, the applicants point out that existing development along the shoreline of Crystal Pond are more densely spaced than our current regulations permit. Any development in place prior to updated regulations are “grandfathered” under state statute. Going forward, new development must adhere to existing regulations in place at the time of the application. In *A Plan of Opens Space and Conservation*, we adhere to the recommendation of maintaining a minimum effective density in a drinking water supply watershed be 2 acres per residential structure.
3. As proposed, this project will remove the potential agricultural use from this property going forward.
4. As a former field used for agriculture, it will be important to investigate if tile drains were installed under the field to improve subsurface drainage. Tile drains are an accepted agricultural practice to help extend the growing season by improving drainage which allows equipment to get out onto the fields earlier in the season. A side effect of tile drains is that they transport soluble

nutrients and pathogens through them with limited opportunities for natural processes to treat the drainage. If there are tile drains on the field, and multiple septic leach fields are installed over them or upslope of them, there is the potential for the leachate to bypass the natural treatment processes and be conveyed with limited treatment to the tile drain outlet. There are limited records of where tile drains have been installed in Woodstock. Many tile drain projects were self-funded by the farmers without federal assistance. The Conservation Commission recommends investigating the potential for tile drains installed on that field by 1. Speaking with the previous landowners and/or 2. A site walk to look for a tile drain outlet on the downslope edge of the field and/or 3. Use of ground penetrating radar to look for the remains of the drainage conveyance system. If tile drains are located on the field, we strongly recommend they be removed prior to siting any septic systems on the land.

5. During development, it will be important to limit the disturbed areas on the property at any given time and install proper E&S controls around each disturbed area to prevent sediment from washing into Crystal Pond.
6. The Conservation Commission recommends that the impervious cover from each structure drain into an infiltration areas/rain garden to limit the impacts of development on this property to pre-development hydrology where practical. Where driveways slope towards the lake, it will be important to install water-bars to direct stormwater into infiltration areas.
7. All the proposed septic system leach fields are greater than 50 feet upgradient of Crystal Pond, as required under the public health code for drinking water supply watersheds. The concentration of the septic system leaching fields on the property is of concern. While the soils are listed as high for septic system suitability, their proximity to each other may impact their ability to infiltrate properly. If the Department of Public Health recommends a 50 foot downslope separating distance between septic system leach fields and a bioretention structure for stormwater, the maps provided by the applicant do not demonstrate a separating distance between leach fields to meet that same requirement. The Conservation Commission recommends this application be reviewed by the CT DPH Drinking Water Division for compatibility with their water quality goals in a Class AA watershed to assure the clustering of the leach fields will not lead to premature failure of one or more of the systems.
8. The existing vegetation along the shoreline of Crystal Pond is not sufficient as a stormwater runoff filter. A functional role of riparian vegetation, besides aesthetics and improved wildlife habitat, is to slow down and encourage infiltration of stormwater runoff. The width of the riparian buffer for effective water filtering/infiltration should be at least 35 feet for sediment removal and wider for nutrient removal. The Conservation Commission realized the biggest asset of this property is its shoreline along Crystal Pond. We request the property owner to increase the width of the natural vegetation along the shoreline and design limited pathways to access the shoreline. To maintain their view of the lake, this planting can be done using native trees and shrubs and herbaceous plants that will not obstruct their view. It is most important to not maintain mowed grass to the shoreline as this may encourage resident Canada geese to become established. Resident Canada geese have the potential to contribute nutrients and pathogens to Crystal Pond.
9. The Conservation Commission requests that the applicant limit the installation of lawn area in the project area and instead use meadow plantings to enhance the infiltration of stormwater while enhancing the biodiversity potential of the property. Meadows, once established, require less maintenance and chemical pesticides/fertilizers than lawns and will help to preserve the water quality of Crystal Pond.
10. The Conservation Commission does have knowledge of what species has caused the Natural Diversity Data Base blob to overlap the lake/shoreline transition zone on the lake frontage. We recommend strict limitations on the installation of any hardscape retaining wall along the lake shoreline that may impact the lake to shore transition of any potential aquatic species that lives within that ecotone. Addendum to this statement should read does not have knowledge.
11. In a document in the PZC packet dated 2/13/2020, the applicant prepared a defense suggesting the open space set aside requirement based on the PZC subdivision regulations dated July 1, 2012 for this parcel was met by the original landowner when donating the 20 acres to The New Roxbury Land Trust in 2009. The Conservation Commission does not see that as a relevant argument because the subdivision application before PZC is for only for parcel 39F, not the entire parcel. According to their own notes, Lot 39F was created in 1953.

12. The Conservation Commission has questions as to what may happen to this property after development once the applicants are no longer the owners. While the applicant intends to use the development for family and guests only, will the deed prohibit the cottages from being upgraded to year-round homes in the future after the property has a new owner? This property is not currently being proposed as a commercial development. Could these properties, under a hardship, be allowed to be converted to rental cottages? If so, are the regulations for commercial property development a consideration?

A copy of these meeting minutes will be sent to Delia Fey, NECCOG Senior Planner, Jeff Gordon, Chairperson, Woodstock Planning and Zoning Commission, Tina Lajoie, Woodstock Wetlands Enforcement Official