

To: Guilderland Planning Board
From: Guilderland Conservation Advisory Council
Date: January 24, 2013
Re.: Melewski. 32 Fryer Lane, Altamont. NY 12009

APPLICATION

Applicant(s): Bernard C. Melewski, 32 Fryer Ln., Altamont, NY 12009

Proposed Subdivision: A proposed four lot subdivision of 52 acres.

Location: east side of Rt. 156 at the border of Guilderland and New Scotland.

Zoning: R-3.

Site Inspection Summary:

Site Inspection Date: January 19, 2013

Meeting Attendees: (December 17, 2012)- Applicant Bernard Melewski; GCAC Members David Heller, Gordon McClelland, Steven Wickham and John Wemple, Chair. (December 17, 2012).

Inspected by: Applicant Bernard Melewski; GCAC Members Steven Albert, Gordon McClelland, Steven Wickham and John Wemple, Chair.

Conclusions: Since the property is quite sizable, there does appear to be adequate space for the addition of three lots with building envelopes of sufficient size to accommodate the proposed subdivision plan. Lot B, which is relatively flat and has a large area which has already been cleared, does not appear to be a problem. Lot C, is of a unique shape but does provide a large area for not only protecting against disturbance of the stream which runs through it but also an area to the rear of Lot B of sufficient size on which a residence could be built. Lot D is the largest lot with a relatively huge building envelope. Applicant is not sure just where he and his wife will decide to have as a building site, but in either case, due to the steep slopes on Lot D, they will need to have an appropriate driveway planned out in order to have safe access to the building site not only for themselves but also for emergency vehicles in case they are needed. GCAC does not envision much negative environmental impact of this subdivision other than possibly three more residences where there now is one as well as one more farm possibly going out of business and thus adding to suburban sprawl.

Submitted by: _____
John G. Wemple, Jr. - Chair

INSPECTION DETAILS

Applicant(s): Melewski

Address: 32 Fryer Ln., Altamont

Background: According to Applicant, he has lived on the property for twenty-one years. Residence is large modern looking farm house. Property had been part of a larger dairy farm on which the Melweski had lived as tenant farmers, until they purchase half of the Fryer farm part of which they subsequently sold. Near the front road is an old Dutch barn which Applicant note was built in 1730 and an addition added to the end added in 1830. Plan is to subdivide the property into four lots. Possible plan is for Applicant and his wife to build a new residence for themselves on Lot D which does have a sizable building envelope.

Topography: As mentioned below in the Drainage section, the terrain on this property varies. The area to the south of and leading back from Fryer Lane to the house is relatively flat and open as is an area to the north of the residence. Likewise there is a similar long open area which is flat and runs parallel to the rear (east side) of Lot B. Lot B is also relatively flat. Rear of Lot C has a rather steep ridge which it shares as a boundary with Lot D. Highest point on the property is at the top of a hill to the east of the residence. Site drawing shows the areas on Lots A and D where the slope of the ridges are 12 degrees or more which mark areas which should be avoided or approached with caution in construction of residences and roadways.

Vegetation/Trees: According to Applicant there is a hemlock forest and butternuts on Lot D and the upper part of Lot C. He further noted that on Lot B, where GCAC noted locust trees and a large cleared area, there is fire wood and chips. On Lots A and D Applicant states he has maple groves. On Lot D, GCAC saw evidence of maple tree having been tapped. Maple syrup is one of the products of Applicant's farm business, the Black Creek Farm, which is primarily a vegetable farm. Other trees noted at time of site visit were white pine and birch.

Soil: Applicant noted that soil is stoney and that it has been necessary for him to have raised bed in the growing of his farm produce. In walking the property, rocky trails were noted as well as the abundance of stone for stone walls. At time of 1/19/13 site visit, property was covered with snow, but a review of the soil maps on sheets number 17 and 24 in "Soil Survey of Albany County, New York" -1992 – James H. Brown indicates that there are seven different soils on this property.

Lot A has ChD soil on all the east half of the lot except for a small triangular shaped portion at the lower mid corner on which there is CkB soil. The west half has two types of soil. CkB covers the area along the west boundary which is slightly smaller than the section to its east which has ChC soil and on which the existing residence is located.

Lot B has RhA soil on the upper, northern, half and CkB soil on the lower, southern, portion. While the central portion of Lot C is covered with RhA soil, there is an area which makes up between 1/5 and 1/4 of the lot at its most southernly portion where there is CkB soil. There is also a strip about the width of the set back along the upper half of the southeast boundary of this lot on which there is ChC soil.

Lot D has CkB soil on its driveway area and entrance area to the main portion of the lot on which there is primarily ChC soil which also has a very small area of Fx soil at its northernmost corner. To the south of this Fx area there is an area of RhA soil running along the east boundary and then another small area of Ma soil on which there are two small ponds. Adjacent to these ponds and to the west is a relatively small area of ChD soil which also runs along the lower portion of this lot to the north and east of Lot A; and to the east of this and below the pond area along Lot D's lower eastern boundary is a small area of CeA soil.

A brief description and some limitations of these soils is as follows.

CeA - Castile gravelly loam, 0 to 3 percent slope - The seasonal high water table is at a depth of 1 ½ to 2 feet from March to May. Depth to bedrock is more than 60 inches. Permeability is moderate to moderately rapid in the surface layer and subsoil and rapid or very rapid in the substratum. The available water capacity is moderate, and surface runoff is slow. The main limitations on sites for dwellings with basements is the seasonal high water table. Foundation drains and protective coatings on basement walls help prevent wet basements. Also, diversions and interceptor drains placed between the house and nearby hills will carry some of the excess water away from the site. The main limitation for local roads and streets is the frost-action potential. Using coarse textured subgrade or base material as fill material for roads helps reduce frost action. A drainage system will remove excess water in areas of this soil.

ChC - Chenango gravelly silt loam, loamy substratum, rolling - This soil is very deep and well drained to somewhat excessively drained. The seasonal high water table is at a depth of more than 5 feet. Depth to bedrock is more than 60 inches. Permeability is moderate or moderately rapid in the subsoil and moderately rapid in the substratum. Available water capacity is moderate. Surface runoff is medium. This soil has moderate limitations on sites for dwellings with basements because of slope. The main limitations for local roads and streets are the frost-action potential and the slope. Adapting road design to the natural slope or land shaping and grading help overcome the slope limitation. The major limitations affecting the use of this soil as a site for septic absorption fields are the slow percolation in the subsoil and the slope. Installing distribution lines on the contour and using drop boxes or other structures to promote even distribution of the effluent will overcome the slope limitation. Enlarging the trenches below the distribution lines will increase percolation.

ChD - Chenango gravelly silt loam, loamy substratum, hilly - This hilly soil is very deep and well drained to somewhat excessively drained. The seasonal high water table in this soil is at a depth of 5 feet in most areas. Depth to bedrock is more than 60 inches. Permeability is moderate or moderately rapid in the substratum. The available water capacity is moderate. Surface runoff is rapid. The main limitation of this soil on sites for dwellings with basements is the slope. The hilly landscape increases excavation costs. Designing dwellings to conform to the natural lay of the land or cutting and filling to establish benches help overcome the slope limitation. Erosion is a hazard during construction. Maintaining a vegetative cover in the area adjacent to the dwelling site and diverting water from the construction site help control erosion. The main limitation of this soil for local roads and streets is the hilly slope. It increases the cost of excavation and grading. Laying out the road on the slope and land shaping and grading help overcome the slope limitation. The main limitation affecting the use of this soil as a site for septic tank absorption fields is the slope. The slope limits the placement of tile in the filter fields. Also, lateral seepage and surfacing of effluent in the downslope areas are hazards. Installing distribution lines on the contour and using drop boxes or other structures to promote the even distribution of effluent will reduce seepage.

CkB - Chenango channery silt loam, fan, 3 to 8 percent slopes - This gently sloping soil is very deep and well drained to somewhat excessively drained. The seasonal high water table in this Chenango soil is at a depth of 3 to 5 feet in most areas. The soil is subject to rare flooding. Depth to bedrock is more than 60 inches. Permeability is moderate or moderately rapid in subsoil and rapid in the substratum. The available water capacity is low, and surface runoff is slow. This soil is well suited to pasture, but midsummer droughtiness retards plant growth. Proper stocking rates, rotation grazing, and yearly mowing help keep the pasture in good condition. The main limitations affecting this use of this soil as site for septic tank absorption fields are rare flooding and a poor filtering capacity in the substratum. The rapidly permeable filtering substratum is a

poor filter of effluent. Consequently, ground-water contamination is a hazard. Nearby soils, such as the more sloping areas of Chenango soils that are not subject to flooding are better suited to this use.

Fx – Fluvaquents-Udifluvents complex, frequently flooded This soil unit consists of very deep, nearly level, very poorly drained to moderately well drained loamy soils formed in recent alluvial deposits on flood plains. These soils are subject to frequent flooding and are commonly wet. Bedrock is generally at a depth of more than 5 feet. Permeability, the available water capacity, organic matter content, and soil reaction vary with the composition of alluvium. County soil survey notes that most of the acreage is used as woodland or pasture or is idle. These soils are not suited to urban uses because of periodic flooding and prolonged wetness.

Ma – Madalin silt loam – This nearly level soil is very deep and poorly and very poorly drained. It is in depressions on plains and near hillsides. Areas of this soil are long and narrow or irregularly shaped and range from 5 to 80 acres in size. Slopes range from 0 to 3 percent. The seasonal high water table of this Madalin soil is at a depth of less than ½ foot between November and June. Depth to bedrock is more than 60 inches. Permeability is moderately slow in the surface layer, slow in the subsoil, and very slow in the substratum. The available water capacity is high. This soil is poorly suited to cultivated crops. The seasonal high water table is a limitation. Closely spaced subsurface drains in combination with open ditch drainage lower the water table. Drainage outlets are generally difficult to establish because of the basinlike topography of this soil. A conservation tillage system, cover crops, and tillage at the proper moisture content help maintain soil tilth and organic matter content. This soil is moderately suited to pasture. Rotation grazing, proper stocking rates, and restricted grazing during wet periods help keep the pasture in good condition. The main limitation of this soil for dwellings with basements is the seasonal high water table. Diversions placed above the building site, foundation drains, and a protective coating on basement walls help prevent wet basements. The main limitations of this soil for local roads and streets are the seasonal high water table, the low strength, and the frost-action potential. Constructing roads on raised fill material and installing drainage systems will increase soil strength. Providing graded subgrade or base material to frost depth will reduce frost action. The main limitations affecting the use of this soil as a site for septic tank absorption fields are the seasonal high water table and slow percolation. Adjacent soils that are higher on the landscape are better suited to this use. Septic systems on the higher areas of this Madalin soil and on areas of better drained included soils will adequately filter effluent. A drainage system around the absorption field and diversions to intercept runoff from the higher areas will reduce wetness. Enlarging the absorption field or the trench below the distribution lines will improve percolation.

RhA – Rhinebeck silty clay loam, 0 to 3 percent slopes. -This nearly level soil is very deep and somewhat poorly drained. The seasonal high water table in this Rhinebeck soil is at a depth of ½ foot to 1 ½ feet. Depth to bedrock is more than 60 inches. Permeability is moderately slow in the surface and subsurface layers and slow below. The available water capacity is moderate, and runoff is slow. The county soil survey noted that most of the acreage is used as cropland, hayland, or pasture. The main limitation of this soil on sites for dwellings with basements is the seasonal high water table. Foundation drains and interceptor drains upslope from construction sites will divert runoff and help prevent wet basements. The main limitations of this soil for local roads and streets are the seasonal high water table, the low strength, and the frost-action potential. Constructing roads on raised, coarse textured fill material will reduce the frost-action potential and improve soil strength. Raising the level of fill material will reduce wetness. The main limitations affecting the use of this soil as a site for septic tank absorption fields are the seasonal high water table and slow percolation. Installing a drainage system around the

absorption field and intercepting runoff from the higher areas will reduce wetness. Enlarging the absorption field or the trenches below the distribution lines will improve percolation. This soil, especially when wet, has low bearing capacity. Excavations and cutbacks will cave or slough.

Drainage/Wetlands: According to Applicant, there are no wetlands on the property and none were observed by GCAC at time of 1/19 site visit although at time of the visit not all of the property was walked due to snowy condition. Applicant did note that there is a little drainage along the lower edge of Lot D. He further noted that the course of the stream which runs across Lot C and the corners of Lot B is away from Route 156 in an east and north east direction. On the site drawing, Applicant makes provision of 100 ft. stream buffers on both sides of this watercourse which restricts development on that part of the property. At time of 1/19 site visit, GCAC walked on varying terrain on the proposed new lots and did not observe any areas which appeared to have problems related to drainage. When Lot D is developed, the access driveway could pose a problem due to the slope which will need to be navigated. Thus, appropriate planning will need to be made to avoid too steep a climb as well as to avoid the creation of drainage problems. Due to the snow covered ground, GCAC avoided closeup inspection of the ponds along the east boundary of the property which are shown on the site drawing as well as on the Town Tax map which show a water course of about 400 feet from the west leading to the larger pond. According to Applicant, pond(s) are spring fed. A review of the contour lines on the site plan as well as US Dept. of Interior Geological Survey maps (Voorheesville and Altamont quadrangles 1980 photorevised editions show that the natural drainage would be from west to east since the elevation is near 400 ft. AMSL along Rt. 156 (the westmost boundary) and between 360 and 350 ft. AMSL along the east boundary. The exception being that within the property there is a ridge of approximately 400 ft. AMSL which runs through the east half of the property with the high point being east of the existing residence where it is approximately 430 ft. AMSL. Because of the ridge, natural drainage would appear to be in various directions and would follow ravines along these elevated areas. Site drawing shows areas on Lots A and D where there are steep slopes of 12 degrees or greater.

Septic/Wells: Application states that plan is to use wells and septic system. If and when the lots are developed, it will be necessary for the Applicant or new owner(s) to work closely with the County Dept. of Health to ensure that codes related to wells and septic systems are followed.

Visual Impact: Since no definite plans have been made related to exact location of possible structures on the proposed new lots, it is difficult to determine what, if any, impact the development on these lots may have visually. Applicant did make note that the property can be seen from the Helderberg Escarpment. Due to the abundance of trees on the property, GCAC feels that to a large degree new structures on the property could be hidden from neighbors.

Endangered Species: According to Applicant, there are no Karner Blue butterflies on the property nor are there any Indiana bats although bats have been seen circling around the house. GCAC did not observe any endangered species at time of 1/19/13 site visit although at that time the ground was pretty much covered with snow.

Historical Considerations: According to Applicant the old barn along Fryer Lane near the driveway to the house is a 1730's Dutch Barn. At time of 1/19/13 site visit, GCAC toured the barn and noted it being in good condition. Applicant claims there is no cemetery on the property but that there is one adjacent to it. He further noted that there are no Revolutionary War or Indian

relics on the property but there are lots of rock walls. GCAC did not observe anything of historical note other than the Dutch Barn.

Submitted by: _____
John G. Wemple, Jr. - Chair