To: Guilderland Planning Board
From: Guilderland Conservation Advisory Council
Date: May 22, 2013
Re.: Miller - Pangburn Farms, Pangburn Road, Altamont 12009

APPLICATION
Applicant(s): Troy Miller, 10 Indian Maiden Pass, Altamont, NY 12009

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

Location: Just north of the village of Altamont, to the west of the point where Route 397 crosses the Bozenkill.

Zoning: RA-5

Site Inspection Summary:

Site Inspection Date: October 20, 2012; May 18, 2013.

Meeting Attendees: (October 15, 2012) Applicant Troy Miller; GCAC Members David Heller, Gordon McClelland, Stuart Reese, Steven Wickham and John Wemple (Chair).
(May 13, 2013) Applicant Troy Miller; GCAC Members Steve Albert, David Heller, Gordon McClelland, Stuart Reese and John Wemple.
Inspected by: (October 20, 2012) Co-applicant George Slingerland: GCAC Members Stephen Albert, Gordon McClelland, Steven Wickham and John Wemple (Chair).
(May 18, 2013) Applicant Troy Miller; GCAC Members Stephen Albert, David Heller, Gordon McClelland, Stuart Reese, and John Wemple.

Conclusions: In reviewing the mortgage agreement, filed 8/1/11 with the Albany County Clerk's Office, it was noted that the Applicant has very little leeway as to the number of proposed lots for the subdivision. Item 7 in the mortgage agreement sets forth that the the Mortgagor (the Applicant) may alter the property as it sees fit for the purpose of creating an approved subdivision with a minimum of ten lots. Since the total acreage is 52.2 acres and the zoning is RA-5, it appears that a conventional subdivision is locked into a design of ten lots, no more and no less. This in turn necessitated the creation of some key hole lots due to the lack of sufficient frontage along Pangburn Road.
While the property had been flagged for wetlands but a wetland map was not yet completed, it was felt by GCAC that the Council could go no further with its review until the Applicant supplied GCAC with a wetland map. Furthermore, based on the rough outline of the wetland areas, it appeared that on Lots 9 and 10 as presented on the October 2012 plan there would be no available space for building envelopes.
As of November 19, 2012 (thirty days after the site inspection) GCAC had not received the requested wetland map.
On April 24th, 2013, GCAC Chair was in contact with Mr. Miller who then supplied GCAC with an updated site drawing of a Conservation plan showing the wetlands. Next day, April 25th, 2013, Mr. Miller also furnished GCAC with an updated conventional plan showing revised location of buildable ten lot plan.
If the original conventional plan was to be approvable, the building site on Lot 9 would have had

to be to the north of the wetlands and thus would have required approval for the disturbance of a portion of the wetlands for the access driveway to the residence on that lot.
– Based on the new lot locations on the revised plan, it now appears that the ten lot **Conservation Subdivision** development could be undertaken without much negative impact on the existing environment if tree cutting is kept to a minimum and disturbance to the wetlands is avoided. An appropriate plan for stormwater management should be included to avoid any possible contamination to the Bozenkill and Black Creek on their route toward the Watervliet Reservoir. If the plan is approved, Applicant plans on moving to the subdivision where he will have Lot #6, which is near the pond which Applicant further plans to enhance. He also plans to keep the chicken coup, which is on that lot.

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

INSPECTION DETAILS

Applicant(s): Troy Miller
Address: Pangburn Farms,
Altamont, NY 12009

Background: Although a ten lot **clustered** subdivision had been planned, at time of the 10/15/12 GCAC meeting, the Applicant Troy Miller informed GCAC that a decision has been made to have a conventional subdivision rather than the cluster. According to the Applicant, the property used to be an active farm. Applicant states he and his partner have had the property for under two years. Plan is to have a minimum of curb cuts, possibly 4, to accommodate the ten lots. There would be a singular driveway for the four keyhole lots which would enter from the same curb cut as Lot 5. Applicant noted in October the possibility that entry to lots 9 and 10, which are at the south east corner of the property, would be near the southern property line of the adjacent neighbor (George Pratt). With the revision, this is not necessary. Under the Cluster Plan, entrance to Lot 9 would be shared with Lot 8, and Lot 10 would have its own driveway from Pangburn road. Lots 6 and 7 would also share a driveway. Applicant envisions that the houses would be relatively large, around 2,200 sq.ft. and in the $400K to $600K price range. His original plan was to have at least a 100 feet buffer from the road and the lots would have private little pockets. This set back still exists on the new clustered plan for eight of the lots; but due to the wetlands, planned residence sites on Lots 9 and 10 are about 60 to 75 feet from Pangburn Road. Of the ten lots in the planned subdivision, the two middle lots would be for the Applicants. Lot 6 for the Applicant Troy Miller and Lot 7 for co-applicant George Slingerland.
It should be noted that subsequent to the October 2012 presentation and site visit, the Applicant's plans changed and a revised plan was submitted to GCAC in April 2013 whereby a ten lot conventional plan was devised to adjust the lot lines in such a way as to allow for ten buildable lots. Thus, the ten lot conservation plan that was submitted avoiding much of the wetlands, which run across much of the front portion of the property, was reviewed by GCAC. At time of the May 18th site visit, GCAC gained entry to the acreage via the horse path between proposed Lots 9 and 10 which leads to a paddock area near or on Lots 9 and 10 which is apparently on the wetlands. This paddock area is used by neighbor Pratt.
Applicant Miller further noted that the conservation area will be under the control of the home owners association and is for their use.

Topography: According to the Applicant, and as can been seen by the contour lines on the site drawing, the acreage slopes from the Road down toward the creek and then right back up in a northerly direction. Contour lines indicate the slope is significant up from the north side of the creek near the mid-point of the rear boundary line. Slope at that point determined to be 120% with an angle of 50 degrees. The slope on the front portion of the building envelopes is relatively flat with more slope on the back portions. It can also be seen from the drawing's contour lines just north of conservation lot 3 and about 250 feet to the rear of lot 2 there is a very steep drop off of about 20 feet for an angle of more than 26º. The drawing shows the proposed residence for lot 3 to be almost 40 ft. outside the angle of repose setback line. All the ten lots in the cluster slope to some degree toward the north east with more noticeable downward slope as the lots approach the southern boundary of wetland area 1 and the pond. The wooded area, beyond the pond, which runs along the south side of the creek is fairly level but the drop off at the edge of the creek is very steep. It is straight down or nearly so at certain spots along the horse trail that runs along the top of this area.

Vegetation/Trees: According to Applicant, there is a lot of scrub brush and pine. From aerial photo, provided by the Applicant, there are numerous trees along much of Pangburn Road, as

well as on the south side of the pond and also along the top of a ridge to the south of the creek. As noted elsewhere in the report, Applicant has noted that the lots are not very accessible due to thickness and density of the heavy thickets which apparently cover much of the property. At time of October 2012 presentation it was noted that in developing the property, Applicant does not plan on touching much of the lots other than the ones which he, his partner and a friend would be developing. At time of the October 20, 2012 site visit, it was noted that trees on the property included hemlock, weeping willow, maple, poplar and pine. It was also noted that there was moss on the ground on the front portion of what is now the line between lot 7 and 8 of the cluster. It was further noted that the moss in this heavily wood area was possibly caused by the canopy created by the trees. Applicant pointed out that part of the plan is to cut back a small amount of the heavy growth along Pangburn Road where the utility lines will be located. A major portion of the acreage is heavily covered with thick brush which negated entrance onto some of the lots such as Lot 1, 4 and 5.

Soil: According to the Applicant, the soil is clay, non-drainable junk. A review of Sheet Number 10 from "Soil Survey of Albany County, New York" (1992) by James H. Brown indicates that there are eight different soils on the property.

The rear portion of the acreage, identified as open space – conservation area has Fx soil from approximately the line or slightly north of the line marking the angle of repose northward to the north side of the Bozenkill. The rest of the area north of that has NuE soil with the exception of a triangle of CkB soil which juts about 400 ft. into the property in from the east boundary line about 770 ft. from the Road. A little further to the north is a rectangular area of VaB soil which is about 300 ft. wide and juts into the property about 375 ft. Near the north east corner is a very small area of AnC soil. To the south of the Fx area of soil there is and area of NuB soil which is between 100 and 180 feet wide on most of its area except for a small area of MbB soil at the western border and a much wider area of NuB near the east border where it is about 260 feet wide at the neighboring Pratt boundary line. To the south of this NuB area is large triangular shaped area containing HnB soil which includes all of the south west corner of the property including Lots 1 and 5, all of Lots 2 and 4 except for a very small northeast corner area of Lot 2 and a small sliver along most of the north end of Lot 4 where there is NuB soil. To the south of this NuB area on Lot 4 there is a small area of wet soil along the upper north portion of that lot. The southeast entrance way of Lot 3 also has HnB soil. Lower 2/3 of that lot has NuB soil and the upper (North) third has Fx soil. Front (South) portion of Lots 6 and 7 have HnB soil as far back as just beyond the proposed residence on Lot 6 and along the north edge of the residence on Lot 7. To the north of this HnB area the soil survey map indicates the soil is wet. This wet area will need to be examined more closely before development to determine how wet it really is and possibly move the proposed site of these residences on Lots 6 and 7 to the south if needed. Front portion, back to the south side of the driveway and proposed residence on Lot 8 has HnB soil and to the north including the site of the proposed residence has BuA soil. On Lot 9 the southwest corner back to the point where the driveway turns east into the lot has HnB soil. The remainder of Lot 9 has BuA soil which likewise covers most of Lot 10 except for the northeast corner where there is NuB soil. This triangular shaped NuB area on Lot 10 extends across most of the north boundary with the Pratt property and about halfway down the east boundary along Route 397.

A brief description of the soils along with some of the limitations of these soils is as follows.

AnC - Angola silt loam, 8 to 15 percent slopes - This strongly sloping soil is moderately deep and somewhat poorly drained. It is in the intermediate positions between bedrock-controlled areas and deeper deposits. The seasonal high water table in this Angola soil is at a depth of ½

foot to 1 ½ feet, perched above bedrock, from December to May. Bedrock is at a depth of 20 to 40 inches. Permeability is moderate in the surface layer and slow in the subsoil. Available water capacity is moderate. Surface runoff is medium. The surface layer ranges from moderately acid to mildly alkaline. The main limitation of this soil on sites for dwellings with basements is the seasonal high water table. The moderate depth to bedrock and the strong slopes are also limitations. Long, strongly sloping areas will increase the cost of excavating basements and of smoothing operations following construction. Erosion is a hazard where the soil is bare of vegetation. Installing foundation drains and applying protective coatings to basement walls will help prevent wet basements. A backhoe easily rips the softer shale bedrock when digging the basement. The harder sandstone bedrock is more difficult to remove. Restoring vegetation or applying mulch, and installing diversion ditches or grassed waterways help control erosion. The main limitations for local roads and streets on this soil are the seasonal high water table and the frost-action potential. The costs will be high for construction including excavation and grading. This soil is soft when wet and causes the pavement to crack under heavy traffic. Constructing roads on raised fill material will prevent the road damage that the seasonal high water table causes. Providing a coarse textured subgrade or base material and installing surface or subsurface drainage will reduce the frost-action potential and enhance soil strength. Mulching or revegetating to stabilize graded roadbanks and ditches helps control erosion. The main limitations affecting the use of this soil as a site for septic tank absorption fields are the seasonal high water table, the slow percolation in the subsoil, and the depth to bedrock. A specially designed septic tank absorption field or an alternative system will filter effluent if located in the areas of the deeper included soils in this map unit.. A drainage system around the filter field and diversion ditches to intercept water from the higher areas help control erosion. Revegetating or mulching disturbed areas of this soil helps to control erosion.

BuA – Burdett silt loam, 0 to 3 percent slopes - This very deep soil is nearly level and somewhat poorly drained. The seasonal high water table in the Burdett soil is perched on the clayey subsoil at a depth of ½ foot to 1 ½ feet from December to May in most years. Permeability is moderate in the surface and subsurface layers and slow in the subsoil and substratum. Available water capacity is high, and surface runoff is slow. County soil survey notes that most of the acreage of this soil is used as hayland, pasture, or woodland. The main limitation of this soil on sites for dwellings with basements is the seasonal high water table. Installing foundation drains and applying protective coatings to basement walls help prevent wet basements. Grading the land surface to divert runoff from the higher areas also helps reduce wetness. The main limitations for local roads and streets on this soil are the seasonal high water table and the frost-action potential. When wet this soil is soft and causes the pavement to crack under heavy traffic. Constructing the road on raised fill material will reduce wetness and prevent the road damage that the seasonal high water table causes. Providing a coarse textured subgrade or base material and installing surface or subsurface drainage will reduce the frost-action potential and enhance soil strength. The main limitations affecting the use of this soil as a site for septic tank absorption fields are the seasonal high water table and the slow percolation in the subsoil. A specially designed septic tank absorption field or an alternative system will properly filter effluent. An alternate system will include a drainage system around the filter to lower the water table, diversion ditches to intercept water from the higher areas, and an enlarged trench below the distribution lines to improve percolation.

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.

HnB – Hornell silt loam, 3 to 8 percent slopes. -This gently sloping soil is moderately deep and somewhat poorly drained. The seasonal high water table in this soil is perched above the clayey subsoil at a depth of 6 to 18 inches from December to May. Depth to bedrock is 20 to 40 inches. It restricts rooting depth. Permeability is moderate in the surface layer and slow or very slow in the subsoil. The available water capacity is moderate. The main limitation of this soil on sites 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 and low strength. Constructing roads on raised fill material and installing drainage reduce wetness. Coarse textured subgrade or base material helps improve soil strength. The main limitations affecting use of this soil as a site for septic tank absorption fields are the seasonal high water table, the depth to bedrock, and the slow percolation. According to the soil survey reference book sited, a specially designed septic tank absorption field, including drainage around the site will adequately filter effluent.

MbB – Manlius channery silt loam, 3 to 8 percent slopes - This gently sloping soil is moderately deep and well drained to somewhat excessively drained. Depth to bedrock is 20 to 40 inches. It limits routing depth to 20 to 24 inches. Permeability is moderate. The main limitation of this soil on sites for dwellings with basements is the depth to bedrock. The areas of included soils and nearby soils that are deeper to bedrock are better suited to this use. On this Manlius soil, placing the building on the bedrock and adding fill to landscape around it or ripping the weathered shale are suitable management practices. The main limitations of this soil for local roads and streets are the moderate depth to bedrock and a moderate frost-action potential. Carefully planning roads will avoid cutting grades into bedrock. However, the bedrock is generally highly weathered and easy to rip with typical construction equipment. Providing coarse textured subgrade or base material to frost depth will reduce the frost action. The main limitation affecting the use of this soil as a site for septic tank absorption fields is the depth to bedrock. Adding soil material suitable for an absorption field is needed. Septic tank absorption fields in areas of included soils that are deeper to bedrock will properly filter effluent.

NuB - Nunda silt loam, 3 to 8 percent slopes– This gently sloping soil is very deep and moderately well drained. The seasonal high water table is at a depth of 18 to 24 inches from March to May. Depth to bedrock is more than 60 inches. Permeability is moderate in the surface layer and in the upper part of the subsoil and slow to very slow below. The available water capacity is high, and runoff is medium. 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 divert runoff and lower the water table. The main limitation of this soil for local roads and streets is the frost-action potential. Constructing roads on coarse textured fill material provides drainage away from the roadway. The main limitation affecting the use of this soil as a site for septic tank absorption fields are the seasonal high water table and the slow percolation in the subsoil and substratum. Installing 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.
NuE – Nunda silt loam, 25 to 35 percent slopes - This steep soil is very deep and moderately well drained. The seasonal high water table in this Nunda soil is at a depth of 1 ½ to 2 feet from March to May. Depth to bedrock is more than 60 inches. The available water capacity is high, and runoff is rapid. The main limitations of this soil on sites for dwellings with basements are the seasonal high water table and the slope. These limitations make construction operations difficult. The main limitations of this soil for local roads and streets are the slope and the frost-action potential. Coarse textured fill material will reduce frost heave. The slope makes locating roads difficult. Erosion is a severe hazard. The main limitations affecting the use of this soil as a site for septic tank absorption fields are the seasonal high water table, the slow percolation, and the slope. Other nearby soils that are less sloping are better suited to this use. Finding suitable sites and installation are difficult on this soil.
VaB - Valois gravelly loam, 3 to 8 percent slopes – This gently slopping soil is very deep and well drained. It is on low-lying, gently rolling till plains. The seasonal high water table in this soil is at a depth of more than 6 feet. Depth to bedrock is more than 60 inches. Permeability is moderate in the surface layer and subsoil and moderate to moderately rapid in the substratum. The available water capacity is moderate, and runoff is medium. This soil is well suited to cultivated crops. It is among the best suited soils in the county for food and fiber production. Rock fragments are a slight limitation to cultivation. Erosion is a slight hazard. This soil has no limitations on sites for dwellings with basements. The main limitation of this soil for local roads and streets is the frost-action potential. Constructing roads on coarse textured, raised fill material will reduce the frost-action potential. The main limitation affecting the use of this soil as a site for septic tank absorption fields is slow percolation. Enlarging the absorption field or the trenches below the distribution lines will improve percolation.

Drainage/Wetlands: As noted on the Application for Subdivision, there are wetlands, a pond, a stream, steep slopes and a floodplain. As can be seen on the contour line on the site drawing, the natural drainage is to the north and northeast toward the creek which runs across the rear portion of lots in an easterly direction on its way toward the Black Creek and Watervliet Reservoir. On the April drawings, Wetland areas 1 and 2 are shown as well as the creek, pond and 100 year flood plain.

Septic/Wells: According to Applicant, plan is to hook up to village water and sewer.

Visual Impact: Applicant feels that the visual impact will be minimal especially since the houses will be hidden due to the heavy vegetation and setback from the Road. Since there are equestrian type properties adjacent to both east and west ends of the, plan includes having split rail fencing along Bozenkill Road. Similar fencing is also planned for along the south border of the wetlands on Lots 9 and 10 in order to discourage improper cutting of vegatation on that part of the wetlands. In an effort to add to the visual appeal of the entrance to Lot 3 where the

driveway cuts through a small portion of the wetlands, it is planned to have an arched type bridge.

Endangered Species: Applicant is unaware of any Indiana bats or Karner blue butterflies on the property. No endangered species observed by GCAC at time of site visits.

Historical Considerations: Applicant is unaware of any grave sites, or Revolutionary War or Indian artifacts on the property. Nothing of historical significance observed by GCAC at time of site visits.

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