To: Guilderland Planning Board

From: Guilderland Conservation Advisory Council

Date: December 27, 2013

Re.: Haight, 152 Gray Rd., Altamont, NY 12009

## <u>APPLICATION</u>

Applicant(s): Linda and Paul Haight, 152 Gray Rd. Altamont, NY 12009

Proposed Subdivision: A proposed three lot subdivision of 54.94 acres.

Location: In the northwest corner of the Town, in the Settles Hill area west of Settles Hill Road.

Zoning: RA-5.

## **Site Inspection Summary:**

Site Inspection Date: Saturday December 21, 2013.

Meeting Attendees: (December 16, 2013) - Applicant Linda Haight; GCAC Members David Heller, Gordon McClelland, Stuart Reese, Steve Wickham and John Wemple (Chair).

Inspected by: (December 21, 2013) - Applicant Linda Haight; GCAC Members Stephen Albert, Gordon McClelland, Stuart Reese, Steven Wickham and John Wemple (Chair). We were accompanied by perspective buyers Mr. and Mrs. Fair of Pennsylvania. We also met Co-Applicant Paul Haight as we were about to leave the site.

<u>Conclusions:</u> GCAC does not envision much if any adverse effect to the environment if this property is subdivided as proposed by the Applicants provided the wells and septic system are constructed according to County Health Department recommendations and guidance. It should be understood by whoever develops the Lots that tree cutting should be kept to a minimum. Proper maintenance of the culver under the driveway leading to the residence on Lot 1 will need to be addressed since the seasonal watercourse flows from Lot 3 to Lot 2. Since the proposed new lots were covered by so much snow, it may be advisable to consider having a wetland delineation done to determine whether or not wetlands exist on at least the acreage to be developed.

Submitted by: 12/30/13

John G. Wemple, Jr. - GCAC Chair

## **INSPECTION DETAILS**

## **Applicant(s):** Linda and Paul Haight

Address: 152 Gray Rd., Altamont, NY 12009

**Background:** According to the Applicant, Linda Haight, she and her husband bought and moved to the Gray Road property, which she referred to as the Old Hager Estate, in October 1987. Applicant noted that their residence is located on the high ground about a quarter mile in from Gray Road. At time of site visit, after inspection of the two new proposed lots, GCAC went back to this area and viewed some of the surroundings including the barn and pond. At their previous residence, Paul had an excavation business but found it necessary to move his equipment to another location. Applicant noted the property had been use to be hayfields and used for logging. They would like to sell the property as is but are proposing the subdivision to make it more attractive to a buyer who then could recoup some of the investment by selling off the two smaller lots.

Topography: According to the Applicant, the property is level with the Road at the front and slightly higher toward the rear. She further noted at time of site visit that the width of Lots 2 and 3 may be increased from 200 feet to 210 feet if necessary, thus changing the depth of both which will result in five acres each. It was observed that Lots 2 and 3 slope downward from the highway toward the south and south west. According to Applicant, the northwest corner of Lot 2 had been lower than the road but this was filled in by the Town when they were allowed to use that area for a dump when they were doing roadwork. This area on Lot 2 is now high and open and Applicant feels would be a good spot for a building site. On Lot 3, she feels a good location for a residence would be on the high area not far from the pole barn which sets near the north east corner of the property. Beyond the area of Lots 2 and 3, the property continues relatively flat for a short distance and than gradually slopes upward to the site of the residence and barn. The slope is relatively steep near the house itself. House and barn are on an open area which is fairly level toward the south but beyond this area there is an open area which is very steep as down to a large forest area which appears to be relatively flat and densely treed on the south portion of the property.

<u>Vegetation/Trees:</u> Applicant noted that toward the front of the property some of the heavy brush was cut down for the benefit of wild life. She also noted that trees include Tamatack, hickory, maple, oak and other hardwoods. Lot 2 has primarily deciduous trees with a few pine. Both Lots have large open areas with few trees near the mid section between the front and rear treed areas. There are pine trees on the front (north) portion of Lot 3 as well as a few pines on the open area to the south. Further south there are deciduous trees on both lots. Lot 2 has primarily deciduous trees with a few pines. Some of the other trees on Lot 3 are shagbark hickory and ash. Due to the amount of snow on the ground, it was difficult to identify what small plants may be covering the areas which appear to be open fields.

<u>Soil:</u> According to the Applicant, the soil is clay and she noted that she has not had much luck growing small plants. A review of Sheet Number 9 of "Soil Survey of Albany County, New York" (1992) by James H. Brown indicates that there are five different soils on the property.

They are as follows; BuB, BuC, In, Nuc and NuD. On both Lots 2 and 3, the northwest end has NuC soil from the edge of Gray Road inward (to the southeast) for approximately 175 feet. Southeast of this there is BuB soil which extends about 260 to 350 feet on Lot 3 but slightly less on Lot 2 where the strip of BuB soil is about 130 wide. It should be noted that the use of the term wide is to be understood as being the same as the distance from north to south when viewing the lots along their western boundaries. To the southeast of this BuB soil there is a strip of In soil which is about 40 feet wide along the east side on Lot 3 and about 135 feet along the west side. This same In Soil is about 260 feet wide on the east boundary of Lot 2 and about 310 feet wide at its west boundary. To the south of this is a strip of NuC soil which is about 275 feet wide on Lot 3. On Lot 2 this most southerly portion of the lot has NuC on the east side and BuB on the west side separated by a diagonal line which extends from near the northwest corner of this segment to about 3/5 across the south end of Lot 2. The final segment of Lot 3, which is nearly 90 feet wide, is NuD soil. Soil on Lot 1 is as follows. The driveway, which runs backward to the existing residence and is considered as part of Lot 1 and separates Lots 2 and 3, has soil similar to that of Lot 3 on that front portion. To the rear of this NuD soil runs across the area up to a point just in front of the barn. This NuD area includes where the pond is located and stretches across to and including the acreage to the northeast of the barn. At the northeast corner is a small wedge of BuC soil. To the south of this NuD soil is a strip about 130 – 150 feet wide of In soil on which the barn is located. To the rear (south) of this is an area of BuC soil on which the house is located. To the south of this are areas of NuD, BuB, BuC, AnB and In soil with In covering most of the area with a small area of AnB extending inward about 88 feet along the east side, a large finger of BuC also extending inward from the same side; and a small triangular area of NuD extending inward about 305 feet from the west side about midway back from the house. On the area that is at the far southwest corner there is a small area of BuB soil. Following is a brief description of these five soils and there limitations. BuB – Burdett silt loam, 3 to 8 percent slopes - This gently sloping soil is very deep and somewhat poorly drained. The seasonal high water table in this Burdett soil is perched on the clavey subsoil at a depth of ½ foot to 1½ 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. Surface runoff is medium. 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. Land grading and properly placed diversions will remove surface water. The main limitations for local roads and streets on this soil are the seasonal high water table and frostaction potential. This soil is soft when wet and causes the pavement to crack under heavy traffic. Constructing roads 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 providing 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 field to lower the water table, diversion ditches to intercept water from the higher areas, and an enlarged trench below the

distribution line to improve percolation.

<u>BuC</u> -<u>Burdett silt loam</u>, 8 to 15 percent slopes (BuC). This strongly sloping soil is very deep and somewhat poorly drained. Typically, the surface layer is very dark grayish brown silt loam about 8 inches thick. The seasonal high water table in this Burdett soil is perched on the clayey subsoil at a depth of 6 to 18 inches from November 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 medium. Northern red oak, sugar maple, beech, and hemlock are common to the soil. The main limitation of this soil on sites for dwellings with basements is the seasonal high water table. Erosion is a hazard during construction. Installing foundation drains and applying protective coatings to basement walls help prevent wet basements. Land grading and properly placed diversions will remove surface water. Restoring vegetation, applying mulch, and using temporary waterways and diversions during construction help prevent erosion. The main limitations for roads and streets on this soil are the seasonal high water table and the frost-action potential. 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 includes a drainage system around the filter field to lower the water table, diversion ditches to intercept water from higher areas, and an enlarged trench below the distribution line to improve percolation.

In – Ilion silt loam - This nearly level soil is very deep and poorly drained. The seasonal high water table in this Ilion soil is perched at a depth of less than 1 foot from November to May. Depth to bedrock is more than 60 inches. Permeability is moderate or moderately slow in the surface layer and is slow or very slow in the subsoil. Available water capacity is high. Surface runoff is very slow. County soil survey notes that most of the acreage is used as woodland or brushland. The seasonal high water table or ponding is the main limitation of this soil on sites for dwellings with basements. Foundation drains, subsurface drainage systems, and protective coatings for basement walls help overcome these limitations. Grading to move surface water away from dwellings and diverting runoff from the higher areas also reduce wetness. The main limitations of this soil for local roads and streets are the seasonal high water table, ponding, and the frost-action potential. Wetness softens this soil most of the year and causes the pavement to crack under heavy traffic. A coarse textured subgrade or base material and surface or subsurface drainage away from the road site lower the water and 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, ponding, and slow percolation in the subsoil. Other nearby soils are better suited to this use. A specially designed septic tank absorption field or an alternative system will properly filter effluent. A drainage system around the filter field and diversions to intercept water from the nearby higher areas will reduce wetness.

NuC – This strongly 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 or very slow below. The available water capacity is high, and runoff is medium or rapid. 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 reduce wetness. Erosion is a hazard during construction. Maintaining the vegetative cover adjacent to

the site and diverting runoff from the higher areas help control erosion. 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 roadways. Erosion is a hazard if these sloping soils are left unprotected. 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 and substratum. 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.

NuD - Nuna silt loam, 15 to 25 percent slopes. - This moderately 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. Permeability is moderate in the surface layer and in the upper part of the subsoil and slow or very slow below. 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 slope. Foundation drains and interceptor drains upslope from construction sites divert runoff and reduce wetness. Cutting and filling in construction benches and grading help overcome the slope limitation. Erosion is a severe hazard during construction. Maintaining the vegetative cover adjacent to the site, diverting runoff from the higher areas, and mulching help control erosion. The main limitations of this soil for local roads and streets are the slope and the frost-action potential. 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. Installing a drainage system around the absorption fields 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. Installing distribution lines on the contour with drop boxes or other structures will ensure even distribution of effluent.

Drainage/Wetlands: Although Applicant claims there are no wetlands on the property, besides a wet area which she pointed out toward the rear (south portion) of both Lots 2 and 3, there were signs of much wetness including a wet section near the south end of Lot 3 and much wetness along its east boundary. Wetness was also noted on Lot 2 but it was difficult to determine if this was due to the presence of wetlands or just the result of melting snow since the site visit was on a day when the temperature in the area was close to 50° F following recent snowfalls totaling nearly a foot. Type of soils in those areas may also play a part in the retention of water resulting from the snow melt. There is a culvert under the driveway which appears to carry water from Lot 2 to Lot 3. Based on what the Applicant told GCAC, during the wet season, the width of the watercourse to the west of the driveway, on Lot 2, may be as wide as 10 to 20 feet. At time of site visit, the water at this point was about 3 feet below the driveway. Highest that water has been when it was very high was high enough to cove the driveway. Natural drainage appears to be southwest on the front part of the acreage and generally south and possibly to the southwest at the rear of the residence. Property has a pond near the residence, but the residence is built on a portion of the property which is much higher in elevation than the pond.

<u>Septic/Wells:</u> According to the Applicant, there is plenty of room and there should be no problem for well water. She noted that on the hill they get 35 gal. per minute. She further said they have no percolation on the property and it will be necessary for whoever develops the two

subdivided lots (Lot 2 and Lot 3) to follow the advice of the County Health Department related to a septic system which may require a raised bed system. As noted under the Soil section of this report, there may be a need for extra precautions to be taken in developing an appropriate absorption field.

<u>Visual Impact:</u> Applicant sees no negative visual impact if the two new lots are developed. She noted that Lot 2 has a view of the Bozenkill valley. Due to the amount of trees on the front portion of the property, especially on Lot 3, the development should create a minimal amount of adverse visual impact. If a house is placed on the open area near the northwest corner of Lot 2, some of the trees to the east should act as a buffer and possibly the owner or developer could be encourage to plant some trees and/or bushes to also act as buffer. Since the plan is to have the existing drive dedicated to Lot 1, there will be separate driveways for Lots 2 and 3 which will mean two additional curb cuts along this stretch of Gray Road. Highway Department should be consulted on this for their input.

<u>Endangered Species:</u> None known to the Applicant who did say they have deer, fox and turtle on the property. but no bats or butterflies. GCAC did not observe any endangered species at time of site visit; although the snow covering the lots made it difficult to so determine. There was considerable evidence of deer on Lot 3.

<u>Historical Considerations:</u> According to Applicant, there are no cemetery or Revolutionary War relics. None were observed by GCAC.

Submitted by:		(12/30/13)
John G	. Wemple, Jr GCAC Chair	