

To: Guilderland Planning Board

From: Guilderland Conservation Advisory Council

Date: July 28, 2014

Re.: John and Aleda Graziano, 5701 Depot Rd., Altamont, NY 12009

APPLICATION

Applicant(s): John and Aleda Graziano, 4 North Sage Ln., Menands, NY 12204 (3230 Spanish River Dr., Pompano Beach, FL 33062)

Proposed Subdivision: A proposed two lot subdivision of 10.57 acres.

Location: Site is located in the south central portion of the Town on the south side of depot Road south of the Northeastern Industrial Park.

Zoning: RA-3.

Site Inspection Summary:

Site Inspection Date: July 19, 2014

Meeting Attendees: (July 14, 2014) Presenter Nick Costa; and GCAC Members Jacob Crawford, Gordon McClelland and John Wemple (Chair)

Inspected by: Applicants' son Jason Graziano; and GCAC Members Jacob Crawford, Gordon McClelland, Sean Maguire, Stuart Reese, Steve Wacksman and John Wemple (Chair).

Conclusions: While there is considerable space on the lot for the planned subdivision into two lots, GCAC recommends that approval for this subdivision be based on the Applicants &/or developer to submit an appropriate stormwater management plan which will minimize the possible adverse effect of development on the property related to runoff from one lot to the other. Likewise, the location and nature of the septic tank absorption fields will need to be such that they avoid any cross contamination between the two lots. The Applicants should also be aware of the limitations of the silt loam soils as noted in the Soil section of this report. Thus, special precautions will need to be taken not only in the construction of the residences but also the driveways leading to them. GCAC is also concerned regarding the driveways onto Depot Road. Applicant will need to work with the Highway Department related to the sight distance requirements especially since the lots are on a sweeping curve on this 45 mph highway which has trees along the east side of the lots. Due to the front of the lots being at least 8 to 10 feet below the edge of Depot Road, the Applicants will need to be prepared to use a considerable amount of appropriate fill with culverts to accommodate the driveways.

Submitted by: _____

John G. Wemple, Jr. - Chair

INSPECTION DETAILS

Applicant(s): John and Aleda Graziano, 230 Spanish River Dr., Pompano Beach, FL 33062
and 4 North Sage Ln., Menands, NY 12204

Address: 5701 Depot Rd., Altamont, NY 12009

Background: According to Presenter, Nick Costa the Applicant has owned the property since around the late 1990's. Presently Applicant's son, Jason, lives in the residence located next to the lot which they now want to subdivide into two lots, one of which the Applicants might keep to build a residence for themselves. Presenter noted that this ten acre lot would be divided into a 6+ acre and a smaller one of almost 4 acres.

Topography The Presenter described the lot as being fairly flat fields with a little rise in the area where the proposed houses would be located. At time of July 19th site visit, it was noted by GCAC that the lot was indeed fairly flat with very little rise in the area of proposed houses. It was further noted that due to Depot Road being on a raised road bed, there is a drop in elevation from the edge of the road of at least 8 to 10 feet to the front of Applicants' lot. In walking the open fields which makes up the front portion of the lot it was also noted that there are various spots which are low due to the removal of tree stumps.

Vegetation/Trees: Presenter noted that there are not many trees on the area where Applicant wants to build. The front portion of the lot is primarily an open field on the area of proposed houses with a few trees, notably a stand of trees across a section about a third to half way back on this open area. Most of the rear portion of the lot is a wooded area containing mainly deciduous trees with a few pine. This wooded area about half of the total acreage of the lot to be subdivided. GCAC noted that there is a sizable area of cattails at the northwest corner of propose Lot # 1 as well as along the front area at the bottom of the drop off from Depot Road. Both the west side of Lot # 1 and the east side of Lot # 2 have a fairly dense stand of trees along their boundary lines. There is also a noticeable size area of cattails along the east side of Lot # 2 toward the back portion of the open area. At the rear of the lot there are aquatic vegetation in the area where the Black Creek passes through.

Soil: Presenter noted that the soil on the lot for proposed subdivision is primarily Burdett silt loam and,Ilion silt loam. A review of Sheet 18 found in "Soil Survey of Albany County, New York" by James H. Brown (1992) found this to be accurate. This sheet indicates that while these two soils cover most of the area of the lot, there are also four other soils on the parcel for a total of six different soils. Proposed lot # 1 has a small area of Wo soil at the north west corner. To the east and south of this is an arrowhead shaped area of In soil the south boundary of which goes back to a point about 200 ft. front boundary along the west boundary and cuts diagonally across to a point about 300 feet from the front along the east boundary of this lot. Beyond this and covering much of the remaining area of the lot is a large area of BuA soil, except for a small area of In which juts in along the east side as well as an area about 100 ± ft. wide of RhA soil at the rear (south boundary. At the south west corner there may be a very small area of Mh soil. Proposed Lot # 2 has In soil on almost all its area except for a narrow area of BuB soil which runs along most of the east border, a small area of BuA which juts into Lot # 2 about midway back along the west boundary and an area of RhA soil which is about 150 feet wide at its widest point along most of the south boundary line.

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

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.

Wo soil, Wayland silt loam. This nearly level soil is very deep and poorly drained. It is in depressions on flood plains along major streams. Slopes range from 0 to 3 percent. The seasonal high water table in this soil is at a depth of less than ½ foot from November to June. The soil is subject to frequent flooding for brief periods from November to June. Depth to bedrock is more than 60 inches. The available water capacity is high, and runoff is very slow or ponded. The main limitations of this soil on sites for dwellings with basements are flooding and the seasonal high water table. Alternate sites on the nearby higher soils will avoid the risk of water damage and are better suited to this use. The main limitations for local roads and streets are flooding, low strength, and seasonal high water table. Constructing roads on coarse textured fill material helps to prevent road damage. Building roads around the flood plain will reduce construction costs. The main limitations affecting the use of this soil as a site for septic tank absorption fields are flooding, slow permeability, and the seasonal high water table. In some areas flooding from adjacent streams will gouge out the distribution lines. Flooding and the seasonal high water table will cause most systems on this soil to malfunction. Alternate sites on soils that are higher on the landscape and that are not subject to flooding are better suited to this use.

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.

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.

Mh – Medihemists and Hydraquents, ponded This map unit consists of very poorly drained organic soils or very poorly drained mineral soils. Many areas of this unit contain both soils. The level of water covering these soils fluctuates with the water level of the adjacent bodies of open water. Typically, Medihemists consists of layers of black, well decomposed organic material ranging from 16 to more than 60 inches in thickness. The underlying mineral soil ranges from silty clay loam to gravelly loamy sand. Typically, Hydraquents are mottled with bluish or grayish colors. They range from silty clay loam to loamy sand to a depth of 60 inches or more. Permeability of Medihemists and Hydraquents ranges from moderately slow to moderately rapid. Medihemists range from strongly acid to moderately alkaline, and Hydraquents range from strongly acid to neutral. These soils are mainly idle and provide habitat for wetland wildlife. Onsite investigation is needed to determine the feasibility for all other uses. In most places the marshes are difficult to drain because adjacent open water controls the water level. According to the Soil Survey publication noted above, constructing islands and nesting boxes and seeding will improve wildlife habitat.

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 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. 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 frost-action 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.

Drainage/Wetlands: The Presenter noted that at the rear portion of the proposed lots there is wetlands but further noted the 100 foot buffer area as indicated on the concept plan. Near the midpoint of the front property line there is a culvert which crosses under Depot Road. Application for Subdivision form notes the site contains a stream, wetlands and that the Black Creek & freshwater wetlands are located to the south of the (2) lots. At time of site visit, it was noted that much of the soil on the open fields was wet with standing water in tracks made by vehicles. A review of contour lines on the concept plan as well as lines on the USGS map of the Voorheesville quad on www.topoquest.com/map show the area to be considerably flat setting at 320 feet AMSL Elevations to the rear (south) as well as to the east of the parcel are higher; thus making natural drainage toward the lot to be subdivided. Due to the raised roadbed for Depot Road, along with the nature of the soil, there is nowhere for stormwater to go once it reaches this property unless it finds its way to the limited culvert under Depot Road. End result is much standing water on the property and along the low area that abuts the highway. On the concept plan drawing at a point about 50 feet south of the Depot Road culvert is a small area marked “Albany County, Easement for Drainage (Map ref #2)” which could be explored to see if this is for the purpose of easing some of the negative effects of the height of the highway in comparison with the Applicants' lot.

Septic/Wells: Plan is to hook up to Town water and to have septic system. Since the plan is to have building sites on the front half of the new lots where there is Burdett silt loam and Ilion silt loam, the soil survey reference book used by GCAC notes 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 in the subsoil as well as ponding where there is Ilion silt loam. A specially designed septic tank absorption field or an alternative system will properly filter effluent. It further advises that a drainage system around the filter field and diversions to intercept water from the nearby higher areas will reduce wetness; On the Burdett silt area, it also advises an enlarged trench below the distribution lines to improve percolation. In the development of these two new lots, Applicants &/or developer will need to work closely with the County Department of Health for advice related to the septic system(s).

Visual Impact: According to Presenter, proposed residences would be similar to houses already in the neighborhood and they would not look out of character. Because of the trees that line the west and east side of the property, any adverse visual impact of two new residences should be minimal.

Endangered Species: Presenter noted that he will need to check out the data base to see if there are any endangered species on the site. GCAC did not observe any endangered species at the time of the July 19th site visit.

Historical Considerations: Residence next to the lot for proposed subdivision was built in 1855 per Town Assessor's records. Presenter noted that the property had been used as a farm. Jason noted that there is nothing of historic note other than the old house and barn and that there is no cemetery that he knows of. GCAC did not observe anything of historical significance at time of July 19th site visit.

Submitted by: _____

John G. Wemple, Jr. - Chair