To: Guilderland Planning Board

From: Guilderland Conservation Advisory Council

Date: April 29, 2016

Re.: Phillips Hardware – Route 158, Alt5amont, NY 12009

APPLICATION

Applicant(s): Jon Phillips, 6495 Route 158, Altamont, NY 12009

Proposal: A proposed development of a 13+ acres two lot site.

Location: At the intersection of Routes 146 and 158 approximately 1.8+ miles east of the Altamont Village line.

Site Inspection Summary: Site Inspection Date: April 16. 2016

Meeting Attendees: (April 11. 2016) Owner Jon Phillips, Presenter Mark Jacabson; Town Council Member Lee Carman; GCAC Members Stephen Albert, Martin Gnacik, Martha Harausz and John Wemple, Chair.

Inspected by: Stephen P. Walrath, L.S.; GCAC Members Stephen Albert, Martin Gnacik, Martha Harausz and John Wemple, Chair.

Conclusions: Although the Presenter assured GCAC that the plan has met all the requirements regarding setbacks, GCAC has some concerns regarding the setback at the southwest corner of the bubble as to whether or not the 100 feet measurement is from the point of the high water level of the Creek as required under Town Code §247-31C and §280-29F.
According to the Presenter, traffic studies show that the Phillips development should not pose a problem. He realizes that there is increased traffic due to events at the Altamont Fair Grounds but feels these should have minimal or no impact on the planned site due to the seasonal use along with the time of day the bubble would be in use. Of further concern of GCAC is the possible limited line of sight if an entrance is planned from Route 158. The proposed entrance needs to be explored further related to the hill and curve in the road. Prior to any construction, there is a need to remove old, apparently unused structures, including a very large chicken coop on the rear portion of the property. From the drawing of the proposed plan, it appears that parking lots and buildings cover almost half of the property. Due to the nature of the soils, drainage is poor on much of the property, which in turn leads GCAC to question the wisdom of placing the stormwater basin so close to the Black Creek. GCAC realizes that the planned development is a large, expensive and ambitious undertaking and thus recommends that the final plan for stormwater management be thoroughly reviewed to guarantee that the catch basin and any other system put in place is sufficient to negate any pollution to the Black Creek which empties into the Bozenkill which subsequently empties into the Watervliet Reservoir. Careful monitoring of construction and testing of the stormwater management system will be essential. If any construction is done near the Creek, the Scio silt loam soil has limitations and poses possible erosion during construction and as noted in the soil section- cutbacks cave or slough. Possible visual impact is another concern. Also, prior to giving approval to the proposed plan, the Town

should explore what new limitations, if any, may be placed on tributaries feeding the Reservoir if work is done to raise the level of the reservoir.

Submitted by: _____

John G. Wemple, Jr. - Chair

INSPECTION DETAILS

Applicant(s): Jon Phillips

Address: 4695 Route 158, Altamont, NY 12009

Background: Applicant's plan is to consolidate the existing Phillips hardware stores and move the corporate office to the Altamont location, to take down the existing building and build a new general business building along with provision for a convenient store, two or three gas pumps and a large athletic building which would be a non-conforming bubble or dome large enough to accommodate training for lacrosse, soccer and other sports. Projected target date for completion of the project is November 1st , but not on line until the septic system is in place. Along with the noted corporate office there is the possibility of including six apartments on the upper floor of the retail building. Plan also include provision for as many as 248 parking spaces although some of these near the Black Creek may end up being banked. The gas pumps would be off to the side toward Route 158.

Topography: According to presenter, the land slopes toward the Black Creek with a difference in elevation of approximately 14 feet from the east side to the west side of the parcel. GCAC observed that much of the land is relatively flat although along the Creek to the north of neighbor H. Dederick there is a steep drop off to the Creek.

Vegetation/Trees: According to presenter the vegetation is secondary growth consisting primarily of buckthorns which is an invasive species of plant life. If it is the common buckthorn (Rhamnus Cathartica) or the smooth buckthorn (Rhamnus Frangula) it is on the list of prohibited plants by DEC as of March 2015 as published by Cornell university 9/10/14. GCAC did not encounter any of this buckhorn at time of site visit although it may have been in the heavy brush area in the midsection of the property which was not walked. At the time of the visit, GCAC observed that most of the trees are of medium size, many of which are tall, a few are large and most are deciduous. Trees include some ironwood and a few pine. There are some large trees on the north area. Due to the nature of the BuB (Burdett silt loam with 3 to 8 % slopes) soil on much of the portion to be developed the soil is soft when wet. This condition was noted by GCAC as the property was walked with areas being very muddy. Dampness of the soil does not appear to be very well suited for trees requiring a strong root structure.

Soil: Presenter described soil as heavy with not a high level of water. A review of Sheet Number 10 from "Soil Survey of Albany County, New York" -1992 – by James H. Brown and the soil map from the USDA soil survey website shows that there are five types of soil on the property. There is a relatively narrow strip of ScA soil along Route 146, the south portion of the property. To the north of this area, there is a large area of BuA soil which extends northward almost half the distance toward the north and covers much of the south portion of the area to be developed. To the north of this area is BuB soil which covers the remainder of the area for development. On both sides of the Creek is a sizable area of ScB soil northward to a point where the Creek takes a turn to the northeast where there is HnA soil. Northeast of this, the Creek flows through a small area of Fx soil where there are a couple spots identified as rock outcrops on the north side of the Creek near the north corner of the acreage. Following are brief descriptions of the soils and some of the limitations as noted in the noted soil source book. 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.
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 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.
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.
HnA – Hornell silt loam, 0 to 3 percent slopes. This nearly level 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 May to December. 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. A specially designed septic tank absorption field, including drainage around the site, will properly filter effluent. ScB - Scio 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 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 subsoil. The available water capacity is very high, and runoff is medium. Main limitation for dwellings with basements is the seasonal high water table. Installing foundation drains with adequate outlets will lower the water table. Erosion is a hazard during construction. Excavations and cutbacks cave or slough easily. Main limitation for local roads and streets is the frost-action potential. Constructing roads with coarse textured fill material and installing surface and subsurface drainage reduces the frost-action potential. Erosion is a hazard during construction. Cutbacks cave or slough. The main limitation affecting the use of this soil as a site for septic tank absorption fields is the seasonal high water table. Installing drainage around the field and intercepting runoff from the higher areas will reduce wetness.

Drainage/Wetlands: Presenter noted that the floodway has been surveyed and the 100 year flood plain determined. He further noted that in 1957 the water from the creek came up to almost the house of Mr. Dederick who has the adjacent property between the Applicant and the Creek. Site & Utility Plan drawing identifies the Creek along that area as Regulatory Floodway Zone AE and shows the 0.2% Annual Chance Flood Hazard line crossing the southwest corner of the Dederick house. Zone AE may be identified as 1% annual chance or 100 year flood while 0.2 % may be identified as 500 year flood. Drawing also shows BFE (Base Flood Elevation) of 306 in the area west and northwest of the bubble and proposed stornwater basin. This may need further explation by the Applicant as the plan develops. According to the Presenter, wetland disturbance will amount to over one half acre but he contends that they can not do the project elsewhere. It should be noted that on the National Wetlands Inventory map of the US Fish and Wildlife Service there is a small area at or near the north corner of the property identified as freshwater emergent wetlands. Presenter stated that the stormwater drainage will be taken care of by a bioretention system consisting of pipes and natural flow. This system should channel stormwater from the parking areas and buildings to the Stormwater Basin located on the west side of the bubble. There is a drainage ditch along the front portion along Route 146 as well as along the lower portion along Route 159 where the drop-off from the highway to the site gradually increases to about six feet as Route 158 approaches Route 146. There are cattails and rushes in this ravine as well as rushes in the ravine along Route 146. Dampness on the property is further noted in the vegetation/trees section of this report. GCAC also noted that the ground was damp as we left the present area of the store and walked in the direction of the Creek.

Septic/Wells: Presenter noted that it is anticipated that they will be able to tie into the Town sewer system via a low pressure system to Guilderland Center. If septic system was to be used, proper percolation will be essential.

Visual Impact: Presenter pointed out that a combination of the fourteen feet difference in elevation from east to west, the trees which would provide a sight barrier and the fact that the two story building would hide much of the 58 foot high bubble would minimize the visual

impact of this planned development on the site. GCAC has reservations regarding the way the bubble may stand out above the tree tops since so much of the vegetation is deciduous which would not provide much of a sight barrier when the trees are barren of leaf coverage. It is suggested that the color of the bubble or dome be such as to blend in with the environment. The view from the Helderberg Escarpment need to be considered in order to minimize the possible negative visual effect.

Endangered Species: None known to the Presenter although he noted it is in the overlay area for the bats. He further noted that the endangered species issue will be formally addressed by an anticipated ecologist's study. No endangered species observed by GCAC at time of site visit.

Historical Considerations: None known to the Presenter. Nothing of historical significance observed by GCAC at time of 4/16/16 site visit.

Submitted by: _____

John G. Wemple, Jr. - Chair