

To: Guilderland Planning Board

From: Guilderland Conservation Advisory Council

Date: November 28, 2014

Re.: Wagner – 2087 West Old State Rd., Altamont, NY 12009

APPLICATION

Applicants: Floyd Wagner & Joyce Mancini, 2087 West Old State Road, Altamont, NY

Proposed Subdivision: A proposed two lot subdivision of 29 ± acres.

Location: Property is on the north side of West Old State Road approximately 0.9 mile west of Route 158 (Parkers Corners). The north side of the property borders the Guilderland/Schenectady line at a point approximately mid-way along the north border of the Town.

Zoning: RA-3.

Site Inspection Summary:

Site Inspection Date: November 22, 2014

Meeting Attendees: (November 17, 2014) – Presentation by Applicants Floyd Wagner and Joyce Mancini: GCAC Members Kevin Connolly, Sean Maguire, Gordon McClelland, Stuart Reese, Gustavo Santos, Steve Wacksman and John Wemple,Chair.

Inspected by: Applicant Floyd Wagner; GCAC Members Kevin Connolly, Sean Maguire, Gordon McClelland, Stuart Reese, Gustavo Santos, Steve Wacksman and John Wemple,Chair.

Conclusions: Provided the final plan for developing this new lot includes appropriate location of well and septic system along with any needed stormwater management plan, GCAC does not envision any negative environmental impact caused by this proposed subdivision. As noted in the Soil portion of this report, there are limitations posed by the nature of the soils on Lot B which should be taken into consideration in the construction of a residence as well in the construction of the driveway. Also, since the residence will be located quite a distance from the highway, the local fire department should be consulted for advice related to any special needs in the construction of the driveway.

Submitted by: _____

John G. Wemple, Jr. - Chair

INSPECTION DETAILS

Applicants: Floyd Wagner & Joyce Mancini

Address: 2087 West Old State Road, Altamont, NY 12009

Background: Presentation of November 17, 2014 was by the Applicants themselves since the scheduled presenter was unable to attend the meeting. According to the Applicant, he and his wife have had the property as one piece for about fifteen or sixteen years. He described the property as a hayfield and wooded area at the rear. He does not have anyone in mind as a purchaser of the new smaller lot and said anyone could buy it. He said years ago it was a cornfield. At the time of the site visit, the proposed smaller 6.3 ± acre lot, which will be referred to as Lot B, was fairly easy to walk since it had been hayed resulting in leaving relatively short grass on most of this lot.

Topography: Applicant described the area of Lot B as one that gradually slopes up to a plateau where the proposed building envelope would be. At the time of the site visit, it was observed by GCAC that the property rises toward the northeast and north from the area of the stream that cuts across the property. The narrow area of Lot B that abuts the highway is relatively flat and then rises toward the rear. The rise in elevation from the lower portion of Lot B to the top flat portion of the lot is estimated to be about 30 feet, similar to that of the larger lot which rises to the area where the existing residence is located.

Vegetation/Trees: According to the Applicant, trees on the property include beach, pine and oak with oak along the boundaries of the rear wooded area. He made special mention of a two hundred year old oak tree, which GCAC observed to the rear of the residence. Applicant has a few new apple and pear trees along the driveway leading to the residence, but there are no trees on Lot B. There is a row of arborvitae trees near the rear east border of Lot B but according to the Applicant they are on the adjacent neighbor's property. As noted above under Background, Lot B is a hayfield. While GCAC did not find it necessary to enter the wooded area since it is not a part of Lot B and does not play a part in the development of Lot B, it was noted that the trees along the outer part of the wooded area are primarily deciduous with a few pine.

Soil: Applicant states soil is a mix with a more clayey mix on the upland area and loam toward the front. A review of Sheet Number 3 of the "Soil Survey of Albany County, New York" by James H. Brown (1992) indicates that there are eight different soils on the property. Soil on the proposed new lot (Lot B) is UnD on the front portion from the Road back approximately 300 feet into the property. To the rear of this, the remainder of the Lot B, including the building envelope, has RhA soil. On Lot B, there may be a very small area of UnB soil along the west side near the road. Soil on the main part of the rest of the property is as follows. There is a narrow strip along most of the rear of the property that has Gr soil. South of that is a strip of EnA soil which is approximately 275 feet wide at the east boundary and becomes narrower to the west to a point 100 + feet from the west boundary where it is about 75 feet wide as it abuts a finger of HuB soil which swings down from the north west corner. This HuB area is about 100 to 150 feet wide and is separated from most of the west boundary by a strip of ScA soil which projects about 75 to 90 feet into the property. There is an area of UnD soil at the south west corner of this wider portion of the property. This UnD soil continues on an angle to the southeast and across the lower part of the new lot as indicated above. Just below this UnD area a small wedge of ScA soil juts in at about the mid point of the lower west boundary with a larger wedge shaped area RkB soil just to the south of it. This RkB wedge, which is about 75 feet wide at the border, extends about 150 feet into the property. Along the south portion, extending about 140 to 160 feet into the property is an area of UnB soil. The remainder of the property, which includes most of the

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already developed area where the driveway and residence are located plus much of the front part of the rear wooded area has RhA soil.

A Using the above reference book as a source, a brief description of these soils, including some limitations thereof, is as follows.

-HuB – Hudson silt loam, 3 to 8 percent slopes – This gently sloping soil is very deep and moderately well drained. The seasonal high water table in this soil is perched above the clayey subsoil at a depth of 1 ½ to 2 feet between November and April. Depth to bedrock is more than 60 inches. Permeability is moderate or moderately slow in the surface and subsurface layers and slow or very slow below. The available water capacity is high. The main limitation of this soil on sites for dwellings with basements is the seasonal high water table. Landscaping around the building and using diversion ditches above it help remove excess surface water. Foundation drains and protective coatings on basement walls help prevent wet basements. The main limitations of this soil for local roads and streets are the frost-action potential and low strength. Providing a coarse textured subgrade or base material to the frost depth and adequate drainage in areas of the wetter included soils reduce frost action and improve 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 slow percolation. A drainage system around the filter field and interceptor drains to divert water from higher areas will lower the water table. Enlarging the trench below the distribution lines will improve the percolation of effluent.

-Gr – Granby loamy fine sand. This nearly level soil is very deep and poorly drained to very poorly drained. The seasonal high water table is at a depth less than one foot from November to June. Bedrock is more than 60 inches deep. Permeability is rapid. The available water capacity is moderate, and surface runoff is very slow or ponded. The surface layer and subsoil are moderately acid to neutral. The seasonal

high water table causes shallow root development, which results in seedling mortality and windthrow hazard. Main limitations on sites for dwellings with basements are the seasonal high water table and ponding. Similar limitation for local roads and streets due to the high water table and ponding. Installing drainage will lower the water table near road sites. Constructing roads on raised fill material will also 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, ponding, and poor filtering capacity. Other nearby soils are better suited to this site.

-EnA – Elnora loamy fine sand, 0 to 3 percent slopes - This nearly level soil is very deep and moderately well drained. Seasonal high water table is at a depth of 1 ½ to 2 feet from February to May. Depth to bedrock is more than 60 inches. The main limitation of this soil on sites for dwellings with basements is the seasonal high water table. Installing foundation drains, applying protective coatings to basement walls, and diverting surface water away from dwellings help prevent wet basements. Main limitations for local roads and streets are moderate frost action potential and seasonal high water table. Adequate drainage of surface water and constructing the road on a coarse textured subgrade or base material help overcome these limitations. The main limitations of this soil on sites for septic tank absorption fields are the seasonal high water table and a poor filtering capacity. This soil is rapidly permeable and is a poor filter for effluent. Consequently, ground-water contamination is a hazard. The author notes that a specially designed septic tank absorption field or an alternative system will adequately filter the effluent.

Other less sandy soils in the higher landscape positions are better suited to this use. -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

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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. -ScA - Scio silt loam, 0 to 3 percent slopes. This nearly level soil is very deep and moderately well drained. Seasonal high water level 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 slow. 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. 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.

-UnD - Unadilla silt loam, 15 to 25 percent slopes. This moderately steep soil is very deep and well drained. 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. The available water capacity is high, and runoff is rapid. The main limitation of this soil on sites for dwellings with basements is the slope. Excavations and cutbacks are subject to caving. The erosion hazard is severe in excavated sites. Grading and cutting and filling to form benches help overcome the slope limitation. Maintaining the vegetative cover adjacent to the site, diverting runoff, and timely revegetating following construction help control erosion. The main limitation for local roads and streets is the frost-action potential. Building roads on or near the contour on raised fill or coarse textured material will provide drainage away from the roadway.

-RkB – Riverhead fine sandy loam, 3 to 8 percent slopes – The gently sloping soil is very deep and well drained. 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 moderately rapid in the surface layer and the subsoil and very rapid in the substratum. The available water capacity is moderate, and runoff is medium. This soil has no limitations on sites for dwellings with basements. Erosion is a hazard on areas of bare soil. The main limitation of this soil for local roads and streets is the frost-action potential. Constructing roads on coarse textured subgrade material will reduce the frost-action potential. Erosion is a hazard on this gently sloping soil. The main limitation affecting the use of this soil as a site for septic tank absorption fields is a poor filtering capacity. The soil is rapidly permeable in the substratum and is a poor filter of effluent. Consequently, ground-water contamination is a hazard. A specially designed septic tank absorption field or an alternative system will properly filter the effluent.

-UnB – Unadilla silt loam, 3 to 8 percent slopes – This gently sloping soil is very deep and well drained. The

seasonal high water table is this soil is at a depth of more than 6 feet. Depth to bedrock is more than 60 inches. Permeability is moderate. The available water capacity is high, and runoff is slow. The 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. Consequently roads

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on raised fill composed of coarse textured base material will reduce the frost-action potential. There are no limitations affecting the use of this soil as a site for septic tank absorption fields.

Drainage/Wetlands: Applicant claims no wetlands and referred to the watercourse that crosses the front of the property as a seasonal stream, about three feet wide which is dry in the summer. He noted the width of stream based on the size of the culvert under the driveway. GCAC did note some water in this stream at time of November 22nd site visit. Natural drainage is to the south and southwest. Besides the culvert under the driveway there is a culvert under West Old State Road near the southwest corner of the front portion of Lot B. Following the stream on US Dept. of the Interior Geological Survey Maps for the Rotterdam Junction, Schenectady and Voorheesville quadrangles, it enters the Normanskill to the southeast of the property on the south side of West Old State Road. It should be further noted that near the northeast corner of the building envelope of Lot B there is a small area which may give the appearance of a small wet land due to it having been wet when the haying was done and the hayer was not able to clear that small area. Thus, while this is at or near the highest point of the property, it stands out at this time due to the higher vegetation on it.

Septic/Wells: Plan is to have septic system and well for water. Applicant noted he has well on his portion of the property which is noted on the concept drawing about 75 to 100 feet north of the stream on the front portion of the lot and to the west of the driveway. No definite location is indicated for the well or septic system on the site drawing. Care must be taken in the location thereof to avoid pollution of the stream which flows into the Normanskill which leads to the Watervliet Reservoir.

Visual Impact: Applicant does not feel there will be any negative visual impact caused by developing the proposed new lot due to the distance (600 to 700 feet) from the highway. Applicant did note that neighbor has concerns regarding headlights shining from vehicle(s) on the proposed driveway which will come in from the south east corner of Lot B. At time of site visit, GCAC did note that the neighboring residences are fairly close to Lot B. Possible planting of some trees or bushes along the property lines may help remedy this potential problem.

Endangered Species: None known to Applicant including Karner Blue and Indiana Bats. No endangered specie seen by GCAC at time of site visit.

Historical Considerations: None according to Applicant. He claims no cemetery or anything of historical significance on the property. Nothing of historical significance observed by GCAC at time of November 22nd site visit.

Submitted by: _____

John G. Wemple, Jr. - Chair