

CAC Advisory Report

Ruge Chevrolet Application for Construction of a Paved Parking Lot

Parcel Location: 3 and 7 North Mabbettsville Road, Millbrook, NY

August 31, 2020

Historical Background

The primary goal of the town of Washington comprehensive plan is to maintain the rural character of the town and its environment. According to James A Coon New York State Council, "*In New York, the zoning enabling acts continue to require that zoning be undertaken "in accord with a well considered plan" or "in accordance with a comprehensive plan."*

A VISION FOR THE TOWN OF WASHINGTON

We envision the Town of Washington will remain a rural community with great scenic beauty, a healthy natural environment, and a high quality of life for its residents.

We envision protecting our Town by ensuring that our working farms, beautiful historic landscapes, water resources, and natural habitats for our plants and animals are preserved for the future.

We believe in maintaining a vibrant and diverse local business district in the Village of Millbrook, and we want to maintain our historic character because of its importance in preserving the look and feel of our community

Discussion (Recommendations will be at the end of the report)

A rural community is in part defined by its aesthetics and appearances, which has a direct influence on the quality of life residents enjoy. A healthy natural environment, including ground waters is also a part of it. Lighting, or lack of it, is another commonality in rural communities. Development styles such as found along Route 9 would not be appropriate in the Town of Washington, nor would they be allowed under the present Comprehensive Plan and Zoning Code.

There are various entities technical issues involved in this application.- There is the owner's desire to do what he would like to do with his this property. There is the right of neighbors to not have this project diminish their right to enjoy their own property. There are people living in that general part of the town who may be concerned with how this project will effect the look and feel of the area as a whole. Then there is the rights of the town itself to preserve the rural look and feel the town has envisioned in the comprehensive plan and zoning code. And there are environmental concerns.

Determining Permitted Uses

One of the two parcels shown in the site plan has been used as a single-family residential home since the 1800s, and still is. Local tax records and the County records show this parcel listed as a single-family residential - and no mention of a commercial parking lot use. The other parcel also originally had a historical building on it which was demolished when the automobile dealership acquired the property around 1968. Even as far back as 1969 comprehensive plan, there is no mention of commercial parking lots in that area of the town, which at the time was zoned R2 - residential low density. Somewhere along the way, that second parcel, the smaller one on the corner lot, was subsequently rezoned for use as a commercial parking lot.

At some point the auto dealership, located across the street on yet another parcel, began to park some

of its inventory on the residential parcel, while continuing to rent the house on it as a single family residential house. Apparently, there is no record to date of the car dealership ever receiving permission to park any of its inventory on this parcel from any town board or town zoning department.

In the mid-1980s our new comprehensive plan and zoning code became more explicit about the uses and restrictions allowed on commercial and residential properties in different zoning districts, including the historical hamlet of Mabbettsville

It might be the case that the dealership simply started parking cars on the residential lot as a de facto use. Under one scenario, it may be possible to consider this under the present zoning law as a pre-existing nonconforming use. There are conditions that have to be met under the zoning code for continued use of pre-existing nonconforming uses on a parcel. Another possibility is that since there is no record of the dealership ever requesting that use, it could be considered as an ongoing illegal use of that parcel. And, thereby, that particular parcel would be subject to conforming to the present uses allowed for its zoning designation (R-210 residential) in that particular zoning district of town.

Under the nonconforming scenario our present zoning code makes provisions for nonconforming pre-existing uses. It does not allow for expansion of them except under very limited conditions, and further states as they become less nonconforming they cannot be made more nonconforming again at a later date.

It would appear the second property is now and historically always has been a residential property. The tax rolls list it only as single family residential, no other uses. If the nonconforming use scenario is accepted, then Section 391. NONCONFORMING USES, BUILDINGS, AND STRUCTURES comes into play, and the amount of the nonconformity, i.e., number of parked cars, cannot be expanded beyond the amount when it first became nonconforming. It does not allow for new expansion, except under very limited conditions, and it further states if it become less nonconforming, i.e., less parked cars, at any time then it cannot be made more nonconforming again at a later date. i.e., more cars.

Permitting Requirements

SWPPP

According to Natalie Browne of the NYS DEC, any disturbance of soil over 1 acre would require Stormwater Pollution Protection Plan (SWPPP) and a NYS DEC permit, approval

Mr. Schuman,

*Currently, the project does not have coverage under the stormwater general permit. I did not review any of their submissions. Any projects over one acre of **soil disturbance** requires coverage under DEC's construction stormwater general permit. **If grass needs to be dug up in order to place asphalt, we would consider that to be disturbance.** (Emphasis added.)*

*Natalie Browne, Environmental Program Specialist,
New York State Department of Environmental Conservation*

A similar statement about disturbances over 1 acre was also made by Brian Scorlick of Dutchess County Soil and Water:

"There are construction requirements that must be followed by all owners/developers of projects greater than 1 Acre in size, regardless of where it is in NY. They are required to

develop a Stormwater Pollution Prevention Plan (SWPPP) that addresses both construction stabilization (erosion and sediment control) and post construction stormwater control. The developer must also obtain permit coverage from the NYS DEC for such activities."

Looking at the site plan it appears disturbance of the areas of construction and landscaping are over an acre.

A conversation with two different blacktopping contractors confirm that in order to construct a paved parking lot of the size outlined on the site plan given the soil conditions of mainly a grassy field, which tends to become muddy especially, during freezing and thawing cycles, they would have the first install a sub-base of anywhere between eight and twelve inches. This would constitute the soil disturbance that both Natalie Browne and Brian Scoralick mentioned.

Ruge Chevrolet parking lot – looking west - showing grassy surface



Percent of Lot Surface allowed to be Covered Under Town Zoning Code

The application is for construction of a paved parking on two parcel of land owned/leased by Ruge Chevrolet. One parcel is 1.45 Acres in size, and as is designated an R-210 - single family land use property in keeping with the existence of a historic home built in the very early 1800s, which has been used continuously as a residence up to the present day. The other parcel is 0.68 acres has been classified as land use 438 - Parking Lot.

The proposed construction project entails a fairly significant amount of asphalt application. According to page 2 of the submitted site plan (attached), the outline of the "edge of paved parking," areas, the construction of four lighting poles, etc., the effected area of the two involved parcels appears to be well over an acre (43,560 ft².)

Coverages of the parcel surface area for many similarly sized lots in the town, including the foot print of a house and accessory structures, are probably in the neighborhood of a 2000 ft.² footprint give or take some.

In an effort to maintain the rural appearance of our town. The zoning code specifically limits the amount of surface coverages on parcels by use and zoning district. According to Town zoning code, paving is considered a surface coverage. In the Hamlet of Mabbettsville, the Bulk Area regulations limit the amount of surface covered to no more than 10% of the area of a residential property, and up

to 60% for commercial ones. One parcel is 1.45 Acres in size, and as is designated residential R-210 - single family land use, and the other parcel is 0.68 acres has classified as land use Parking lot (438) - a Commercial Parking Lot. According to Bulk area regulations, the percent of allowed surface coverage is different for each lot.

Lighting

Lighting — a quality of life and environmental concern issue

From the Comprehensive Plan: We envision the Town of Washington will remain a rural community with great scenic beauty, a healthy natural environment, and a high quality of life for its residents. Our Zone Code we have the means to ensure that vision.

Lighting is an important component of that vision. It influences the look and feel of the neighborhood, the natural environment, and has a direct effect on a property owner's perceived enjoyment of their property. If the lighting for a proposed project depreciates those conditions, it behooves the project application to prove beyond a reasonable doubt why the need for the depreciation caused by the requested lighting outweighs the benefits to the rest of the community as a whole, as described above.

Town Zoning Code Section 483. REQUIRED PLANS

7. The location, height, intensity, and bulb type (sodium, incandescent, etc.) of all external lighting fixtures. The direction of illumination and methods to **eliminate glare** onto adjoining properties must also be shown

Glare and Color Temperature of lighting

The project does contain documentation for lighting, including dark sky compliance, which the CAC highly recommends, as dark sky lighting fits well with the communities desire to maintain a rural environment. And while the site plan appears to address light trespass, which the CAC also considers an important standard for maintaining the look and feel of a rural community, it does not specifically address glare and also the quality of light, that is to say light color temperature, which is commonly measured as degrees Kelvin.

Glare and Light Trespass:

Glare is a visual sensation caused by excessive bright lighting entering the eye directly from light sources or indirectly from reflective surfaces. Example would include nearby bright cars headlights at night or improperly installed street light. Light trespass is light falling where it is not wanted or needed such as onto a neighboring property.

The Present Ruge Parking Lot Showing both Glare and Light Tressass



This photograph was taken on North Mabbettsville Road at the edge of the abutting property. It clearly illustrates the difference between glare and light trespass. Notice there is little if any light trespass at the boundary of the two properties, but glare is quite evident.

The Ruge Chevrolet dealership is probably one of the most brightly lit parcels on all of Route 44 in the Town of Washington. With the exception of this one business, the Hamlet of Mabbettsville has essentially been a dark community at night, free of excessive glare — which we consider to be part of the healthy, natural environments for this area.

Lighting here should be in the orange 2000-2500 Kelvin range which is recommended for less impact on drivers, residents and the ecosystem -- not the blue-white 4000 Kelvin ones shown on the site plan. Lighting on this parcel should not be unpleasant both for vehicles driving through and for residents in their homes. Lighting in the 4000 Kelvin range is too harsh and inappropriate for this area of the town. Typical outdoor lighting for rural neighborhoods, like this one, should be around 2000 to 2500K.

<https://www.ledsmaster.com/why-is-it-better-to-use-warm-or-yellow-tones-for-street-lights>

Why is it better to use warm or yellow color for street lights?

Correlated Color Temperature (CCT) is a way to indicate whether the color is cool or warm. The lower the CCT is, the yellower the color looks. For instance, the 2000 to 3000K on the scale have an amber or orange tone. But as the CCT increases, the color starts to switch from yellow to white, and eventually becomes bluish white, or the cool color.

Why street lights are usually yellow or orange in color? Better transmission and penetration through fog. This is a vital factor that needs to be considered when you are looking for a suitable LED street light for your project because it is closely related to the safety of drivers and passengers. Yellow light is proved to have better transmission than white or cool street lights.

Less physical impact on people

According to recent researches, the blue light will suppress the secretion of melatonin which is a hormone that helps maintain our internal clock and affects our emotion and reproduction. It is also proved that the hormone has a great impact on our immune systems. And thus, many countries are prone to adopt yellow or amber street lamp that eliminate the blue color for the residential areas.

Less impact on the Ecosystem

Introducing street light producing lights similar to daylight in rural areas will mess up the metabolism cycle of plants and animals, especially for nocturnal animals. The bright white light interferes their perception of day and night, and thus affects their hunting, migrating in their lives,

Town Zoning Code Section 485. STANDARDS FOR REVIEW AND DESIGN

5. Lighting

d. Where residential uses adjoin commercial uses, light standards shall be restricted to a maximum of fifteen (15) feet in height. In addition, all lighting (except for security purposes) shall be turned off between 11 p.m. and 6 a.m. Exceptions may be considered for those businesses which are operating during these hours.

Given the underlying issues location, brightness, proposed size, and the uniqueness of this application, the Planning Board may want to consider, by way of having this application fit better into the

community, restricting the hours of operation of the lighting to coincide with the hours of operation of the business. Furthermore, it is recommended that the board specifically include language in the approval process, making it clear no site plan approval will be granted until the town is able to verify that glare and light trespass has been eliminated or reduced to a non-objectionable level.

There needs to be a balancing of landowners' rights to use their land with the corresponding rights of abutting and neighboring landowners to live without undue disturbances (such as noise, smoke, fumes, dust, odor glare, stormwater runoff).

The applicant needs demonstrate why the intensity and number of the lights proposed is not excessive for purposes of safety and adequate illumination. And that the result is not to intentionally or inadvertently to re-create the appearance of a Route 9 style automobile dealership parking lot, which would be contrary to the intended mandate of the comprehensive plan of the town, which is to remain a rural community with great scenic beauty and a healthy natural environment with and a high quality of life for its residents. The amount and intensity of the presently proposed commercial lighting may not be in keeping with that vision, and would be out of place in this part of town.

Section 480. SITE PLAN REVIEW AND APPROVAL

A. The Planning Board shall review site plans for those uses which possess characteristics that necessitate site plan review in each case. This site plan review and approval process regulates the development of structures and sites in a manner which considers the following concerns and, where necessary, requires modification of development proposals to eliminate or minimize potential problems and nuisances. The principal areas of concern are:

1. The balancing of landowners' rights to use their land with the corresponding rights of abutting and neighboring landowners to live without undue disturbances (such as noise, smoke, fumes, dust, odor, **glare**, stormwater runoff);

Look and Feel of the Community -- Screening

Ruge Lot Parking -- Route 44 Facing West



Section 485. STANDARDS FOR REVIEW AND DESIGN Site Plan Design Criteria. The following criteria and standards are intended to provide a framework for site plan approvals ...The following standards are in addition to any other site plan, special permit and subdivision requirements of this Zoning Code

4. Landscape, Buffering and Site Treatment
 - h. Screening of service yards, commercial vehicles, commercial trailers, **passenger vehicles**, **parking areas**, refuse containers and other places that tend to be unsightly, shall be

accomplished by use of walls, fencing, planting or combinations of these, with all such enclosures being compatible in material, texture and color with the principal building or buildings on the site.

7.a. The Planning Board may allow parking spaces within a front building setback line, **if** it finds that **such parking will not detract from the aesthetic character of the district**

In addition to the need for screening, the present parking arrangement in the setback areas of the parcels detracts from the present and future intended aesthetic character of the district. The parking spaces should not be in the setback areas of the parcels. Existing inventory needs to be moved further back than in the property setback areas.

Section 335. Erosion and Sedimentation Control

1. Activities Requiring a Certified Erosion and Sediment Control Plan. A separate soil erosion and sediment control plan shall be submitted to the Planning Board with any application for a special permit, site plan approval, or subdivision when the disturbed area of such development is cumulatively more than one-half (½) acre, or within any application to strip topsoil, regardless of the acreage.

3. Erosion and Sediment Control Plan. To be eligible for certification, a soil erosion and sediment control plan shall contain proper provisions to adequately control accelerated erosion and sedimentation and reduce the danger from storm water runoff on the proposed site based on the best available technology. Such principles, methods, and practices necessary for certification are found in the Dutchess County Soil and Water Conservation District's Soil Erosion and Sediment Control Guidebook. Alternative principles, methods, and procedures may be used with prior approval of the Planning Board. Said erosion and sediment control plans shall contain, but not be limited to the following: (See this section of the Zoning Code for details),

Environmental Concerns Related to Water and the Environment

While asphalt is still widely used, there is an increasing body of scientific literature about the negative effects of asphalt paving on the environment. This project proposes a fairly large application on well over an acre of surface, directly over a type I aquifer, which, among other things, is in nearby proximity to the Village of Millbrook water supply pumping station. The wetlands law specifically mentions protecting aquifers used for drinking water supply as one of its overarching goals

Due to its proposed location being in close proximity to these community resources, a concern would be mitigating or eliminating any short-term and long-term impact this propose project could have on them. Studies have indicated a **correlation between asphalt paving and harmful carcinogens being released into the surrounding environment:**

The Effect of Asphalt Pavement on Stormwater Contamination - Worcester Polytechnic Institute: "Carcinogenic and toxic compounds in water that are sourced from asphalt runoff are of great concern. The data and research provided points to the fact that many changes could be made to policy in order to reduce the penetration of these harmful compounds into the environment."

Environmental Health Perspectives • volume 113 | number 7 | July 2005: "If you look at the asphalt used in a parking lot, the top coat is quite toxic. So if you have a heavy rain [soon] after the parking lot goes in, it's not unusual to see fish kills downstream."

The Case for Porous Paving or Other Alternative Environmentally Friendly Solutions

If paving is to be considered, given the location of the project over a primary aquifer, nearness to the village water supply pumping station and local wells, an environmentally friendly porous paving system of environmentally friendly material is the best solution to address the problems of surface runoff and toxic chemicals entering the water supply

<https://www.truegridpaver.com/complete-guide-permeable-paving-systems%EF%BB%BF/>

A gravel-filled permeable pavement surface such as this stops gravel migration. The patented design allows for flexibility to eliminate cracks or potholes but has enough strength to handle any load on the road. Snow plowing is not a problem and residual ice or snow melts faster than on asphalt or concrete. The installation process for permeable pavers is also quicker and more cost-effective than with asphalt or concrete.

Permeable pavers require almost no upkeep or maintenance and will serve you better than either traditional or porous asphalt or concrete would, and for much longer. If you're in need of a permeable surface solution for a parking lot, sidewalk, driveway, or other surfaces, you should look no further than permeable pavers,

The durability and versatility of this paver system work well for any paved site from driveways to parking lots. Residential, commercial, and industrial needs can all be met by this innovative new product, allowing business owners to spend less and get more for their money as well.

<https://www.permeablepavers.contractors/best-solution-snow-ice-removal.php>

Permeable pavers are the 21st-century solution to snow removal, snowmelt, and deicing.

Permeable Paver Maintenance : As a side note, when addressing snow buildup on permeable-paved surfaces, it is best to use rubber-tipped snowplows and snow shovels, to avoid scratching or damaging the aesthetic and meticulously designed surfaces of the pavers themselves. Furthermore, it is also wise to use an eco-friendly deicer like magnesium chloride, which is very effective and eco-friendly for permeable pavers. This substance gets the deicing job done and it does so without harming the pavers, cars, or machinery.

<https://www.prestogeo.com/blog/porous-pavements-myth-busters-snow-removal>

Using a Snowplow on Porous Pavers: -- Snow blade shoes will protect the paver units, or raise the plow blade about an inch

The Case for Concrete Paving over Asphalt

Consider requiring concrete rather than asphalt because of location over the primary aquifer and nearness to local wells and the village water supply.

<https://www.polishtheplanet.com/blog/article/concrete-asphalt-parking-lots-pros-cons>

Asphalt needs up to six months to fully cure for sealing, while concrete only has to sit for a few weeks. The most important part of the concrete versus asphalt paving debate is the total cost of ownership (TCO), including maintenance.

A Minnesota Department of Transportation pavement study found the average concrete surface needs reapplication of joint fillers and sealants every 28 years, while an asphalt surface requires repair every 16 years. The same study found concrete to last anywhere from 30 to 40 years, whereas asphalt lasts

between 15 to 18 years. In total, concrete can cost nearly 30 percent less than asphalt over the course of its working life

Brief Summary of Issues Covered

- Zoning Issues
- In accordance with the Comprehensive Plan
- 7 North Mabbettsville Road - a non conformity or an illegal use
- Amount of parcel surface coverage allowed
- Number of cars allowed
- Permits required
- Quality of life issues
- Lighting
- Significant increased change in character of the area
- Need for screening
- Water and Environmental Issues

Recommendations

- Submission of a Wetlands Permit Application.
- Condition approval of this application on first receiving and approving the required permits from the involved agencies.
- Submission of an accepted Storm-water Pollution Prevention Plan (SWPPP).
- Submit notification of all satisfactory compliance with NYSDEC approvals.
- Submit notification of compliance with DCDOH regulations.
- Require the use of a less volatile, more stable , environmentally friendly paving material - such as one of the various types of porous pavers.
- Limit the size of the project, the amount of parcel surface covered in keeping with the Area and Bulk regulations of the HM district.
- As expressed in the zoning code, limit lighting and the number of cars allowed to be in keeping with what is expected in the historic, rural hamlet of Mabbettsville.
- Improve screening so as to be invisible or nearly so from surrounding properties and the roadways.
- Insure the amount and intensity of lighting used be in keeping with the appearance and environment of a historic, rural hamlet as expressed in the Comprehensive Plan and does not have a desultory effect on neighbors' rights to enjoy their property.
- Consider a motion sensor to turn lights on and off as needed during hours of operation.
- Lighting should be restricted to the hours of when the business is actually open.
- Lighting color temperature should be in the 2000-2500 Kelvin range, with 2500 Kelvin being most suitable for quality of life and aesthetic issues in this area. Not the 4000 K lights shown on the site plan, which are too bright and too blue for this location.
- Include language in the approval process, making it clear that no site plan approval will be granted until the town is able to verify that glare and light trespass have been eliminated or reduced to a non-objectionable level.
- Land use on the two parcels comprising the application should be in accordance with what is permissible under the existing zoning code and in accordance with Town comprehensive plan.