DRAFT ENVIRONMENTAL IMPACT STATEMENT

EQUESTRIAN ESTATES

Mixed Use PUD Application
Red Schoohouse Road
Village of Chestnut Ridge, Rockland County, New York

Lead Agency:
CHESTNUT RIDGE VILLAGE BOARD

Project Sponsor:
EQUESTRIAN ESTATES, LLC

Prepared by:
Tim Miller Associates, Inc.

September 2, 2021

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Red Schoolhouse Road
Village of Chestnut Ridge, Rockland County, New York

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September 2, 2021

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1.0 EXECUTIVE SUMMARY

This Draft Environmental Impact Statement (DEIS) has been prepared in response to a Positive Declaration issued by the Village of Chestnut Ridge on June 18, 2020, in connection with a Mixed- Use Planned Unit Development (PUD) Zoning application by Equestrian Estates, LLC, the "Applicant" and owner of the subject property. The proposed project is located on Red Schoolhouse Road in the Village of Chestnut Ridge, Rockland County, New York.

This DEIS has been prepared to evaluate potential environmental impacts associated with the proposed mixed-use development. The DEIS has been prepared in accordance with the New York State Environmental Quality Review Act (SEQRA) and Part 617 of the regulations implementing SEQRA. The content of this DEIS was established by a scoping outline adopted by the Village of Chestnut Ridge, Village Board, acting as the SEQRA lead agency, in coordination with all other involved agencies, and after a public hearing and public comment period. The Village Board adopted the scope for the DEIS at its meeting on October 22, 2020. The adopted scoping outline is included as Appendix A of this DEIS.

1.1 Regional Site Location

The project site is located in the incorporated Village of Chestnut Ridge, contained within the Town of Ramapo, Rockland County, New York. Rockland County is located on the west side of the Hudson River in the lower Hudson Valley region. The Village of Chestnut Ridge is located in the southerly portion of the County. Chestnut Ridge adjoins the Village of Airmont to the west, the Town of Clarkstown to the east, the Unincorporated Ramapo and Village of Spring Valley to the north, and the Town of Orangetown and the Borough of Montvale, New Jersey, to the south.

The project site is less one-half mile south of the Garden State Parkway Extension to the New York State Thruway. (see Figure 2-1).

1.2 Equestrian Estates Site Location

As shown in Figure 2-1, the mixed-use project site is located on the east side of Red Schoolhouse Road in the Village of Chestnut Ridge. The site consists of six parcels in the southerly portion of the Village adjacent to the Village's boundary with Orangetown. The 39.6 acre mixed use project site includes the following Tax Lots, as shown on the tax map of the Town of Ramapo:

- 68.09-2-9
- 68.09-2-10
- 68.09-2-11
- 68.09-2-12
- 68.09-2-22
- 68.13-1-6

1.3 Description of Proposed Action

The project sponsor has a vision for the southwestern area of the Village of Chestnut Ridge. The goal is to create a beautiful hamlet community that incorporates retail development, multifamily residential housing and senior housing resulting in the creation of a nucleus of the Village of Chestnut Ridge.

The development proposal includes up to 62 duplex townhouse units; plus 84 rental flats above the retail building on Red Schoolhouse Road; up to 118 senior residential rental units (limited to those aged 55 and older); and two single family homes in the vicinity of Gary Drive. Thus, the project proposes a total of 266 residential units on 39.6-acre site resulting in an overall density of less than 7 units per acre. The development includes approximately 38,000 square feet of retail/commercial space along Red Schoolhouse Road on the first floor of the building that houses the rental flats, plus a stand-alone pad of 7,500 square feet, for a total of 45,500 square feet of commercial space. The proposed layout is shown in Figure 2-2.

The project sponsor has requested a Zoning Code Amendment to create a new Planned Unit Development (PUD) zone which includes a diversity of residential housing for a variety of demographic groups and includes retail and commercial space to meet their needs forming an integrated community.

The townhouse units will be constructed in up to 31 duplex buildings, each containing 2 dwelling units, for a total of 62 townhouses for sale. Each townhouse will have its own front and rear yard with a two-car garage and a front apron, and will have approximately 3,000 square feet of floor area. The interior layout is an upscale, open design concept that will appeal to today's entry-level home buyers and empty nesters.

The 84 rental flats will each have two bedrooms and approximately 1,100 square feet of floor area. These market-rate rental apartments will be located over approximately 38,000 square foot of first floor retail/commercial space. (There is an additional commercial pad located north of the mixed-use buildings to accommodate a single-story building of up to 7,500 square feet. (Refer to Figure 2-2 Proposed Site Layout Plan). The apartments will be located above the commercial space in Building A1 and A2 and will have elevator access. As shown, the buildings will have three floors of apartments above the retail level. Parking for these residential uses is provided on grade to the east of the building at a rate of 1.5 spaces per 1-BR unit and 2 spaces for each 2-BR unit. There is a potential for shared parking utilization with the commercial space where parking demand is lower when residential parking demand is at its peak, such as overnight.

The senior residential portion of the site contains two buildings each with three floors of residential units for a total of up to 118 two-bedroom apartment units. Up to half of these units will be restricted to persons 55 years of age or older, but all the units will be designed to accommodate a senior lifestyle. The senior community includes recreation and community space in each building. Each apartment is on a single floor and elevator service is provided in each building. The majority of parking for the senior complex is to be located indoors under

each of the buildings. There is also surface parking in proximity to the entrance doors which may be used by residents and guests.

The Equestrian Estates Development includes a 4,000 square foot club house which is provided for community recreational use by all of its residents. The site also includes a 2.6-acre nature preserve which will remain as undisturbed open space in addition to and park and pond areas.

Also shown on Figure 2-2, the continuous pedestrian promenade and park landscaped boulevard, known as Club Drive, is the backbone which binds this community together fostering interconnectivity and socialization as a neighborhood. Club Drive provides an entrance from Red Schoolhouse Road, through the retail / apartment area leading to the senior housing and the townhouse development. Elements on Club Drive will include sidewalks, benches, decorative lighting fixtures and attractive landscaping to create a sense of place. A convenient pedestrian walkway will provide connectivity within the development. The development will have a second access to be known as Equestrian Way, which will provide access to a Village public road known as Loescher Lane, which connects to Red Schoolhouse Road. Equestrian Way will have an additional emergency access connection with Gary Drive to the east, providing emergency access only, to Pascack Road.

The entire development will be serviced by municipal water and sewer. Electric and gas service will be provided by Orange and Rockland Uutilities. All internal access roads would be constructed by the applicant and will be a minimum of 24’ wide and will remain private roads to be maintained via private contractors. Municipal garbage pick-up does not service dwellings located on private roads, thus the Homeowners Association and rental management agency will be responsible for contracting for private garbage pick-up service.

As shown on the Overall Site Layout Plan, the site design will include numerous small detention basins and bioretention areas to handle any increase in the rate of stormwater runoff emanating from the development of the project site. The design will meet the zero net incremental rate of discharge requirement of the Village and the NYS DEC. The stormwater management facilities will be privately maintained by a Home Owners Association (HOA) and/or Master Association to be formed upon construction. Details pertaining to stormwater management are provided in Section 3.2 of this DEIS and in the Preliminary Stormwater Pollution Prevention Plan included as Appendix D.

The applicant estimates that the selling price for the market rate townhouse units will average approximately $550,000. Monthly rents for the apartment flats will average $2,500, which will be affordable to households with incomes of $99,000 or more. Monthly rents for the senior apartments are expected to range from approximately $1,800 to $2,200. Actual market pricing and rental values will be established based upon market conditions at the time of occupancy.

The road and residences could be built over a 12 to 18 month period after all approvals and permits are received. The final residential construction schedule is subject to market conditions.

1.4 Description of Proposed Zoning

The site is predominantly zoned Laboratory Office (LO) with a portion of the site zoned R-35 along the eastern boundary. The LO zone has been largely unsuccessful in the Village and is under consideration in the Comprehensive Plan for alternative uses that could utilize the potential of these properties in a way to benefit the Village.

As illustrated in Figure 2-1, the Applicant proposes to combine lots 68.09-2-9, 68.09-2-10, 68.09-2-11, 68.09-2-12, 68.09-2-22 and lot 68.13-1-6 and develop approximately 39.6 acres into a Mixed Use Planned Unit Development (PUD) on three new lots. The new PUD zone will permit development of a mixed use residential/commercial project that includes a continuum of residential housing options which function as a neighborhood. The combination of residential and retail/office uses in a single development will result in a walkable, compact integrated community.

1.5 Project Purpose and Need and Benefit

The mixed use multifamily/retail development is being proposed to provide a core nucleus to the Village of Chestnut Ridge. It is the applicant's objective to provide quality market-rate multifamily housing in order to provide a choice of new housing options in the Village. Thus, the project is composed of a mix of housing types including market rate duplex townhouses; market rate rental units to accommodate the needs of millennials, other young professionals and others who prefer rental housing; and market rate senior rental housing in two adjacent buildings to foster socialization among the senior residents. There is a continued demand for the quality of life and maintenance free lifestyle that accompanies townhouse and rental living.

The senior residential rental housing is being proposed to meet the rising demand for this type of housing appropriate for a population on a fixed income. The senior development will offer moderately priced senior citizen housing in the Village of Chestnut Ridge and the Rockland County region.

This project will also address the unmet need for upscale low maintenance residential housing in the Village of Chestnut Ridge and the region. This type of housing is sought-after by both millennials and empty-nesters.

The proposed flats will address the unmet need for smaller rental apartments for individuals and couples. The retail component will provide needed convenience shopping and services for the southern portion of the Village.

The site is well suited for development due to its proximity to the NY State Thruway access and public transportation.

The project has been designed to meet the following needs:

- Directly responds to the community growth goals and specific site usage set forth in the anticipated Village Comprehensive Plan; *and*

- Generates substantial tax revenue for the Village and the East Ramapo Central School District, in addition to other municipal service districts including emergency services (see Section 3.5 Demographics & Fiscal Resources)

This project is being proposed to address the need for quality market-rate townhouse dwellings and market-rate and affordable senior rental apartments in a location that has access to major transportation routes of the region. The intent of the applicant is to provide this housing while minimizing potential impacts to the greatest extent possible.

1.6 Project Benefits

The Equestrian Estates development has been designed to meet the planning objectives expressed by the Village of Chestnut Ridge:

- Providing a mix of market-rate and rental housing to provide a diversity of housing from being exclusively single-family residential development in the Village;
- Provide senior rental apartments designed to specifically accommodate the needs of a senior community; and
- Provide an increase in tax rateables to help fund the provision of services by the Village to its residents.

The combination of residential and retail/office uses in a single development will result in a walkable, compact integrated community. The community center will offer recreation opportunities for the residents of all the housing types encouraging socialization among all residents fostering a sense of community. The retail center will provide goods and services to support the needs of residential development and the residential population will provide a ready market to support the various retail establishments. Development in this area is well positioned based upon the excellent access provided by the NY Thruway and the Garden State Parkway connection in close proximity.

When combined with the 2.6-acre nature preserve in the northeast portion of the project site, and the ribbons of open space in the Club Estates Townhouse area, plus the undisturbed area allocated to preserving the integrity of the stream corridor, the site design creates a park like setting.

In addition to fulfilling planning goals, at today's tax rates, the mixed use PUD development, is estimated to generate total annual real property tax revenue of approximately $2,544,170 of which approximately $116,000 would go directly to the Village. The funds would represent more than a ten-fold increase in the property tax revenue currently collected by the Village on these parcels and equates to about 6.1% of the Village's total revenue from real estate taxes. An additional $1.2 million in tax revenue would be generated to support the East Ramapo Central School District.

1.7 Approvals, Reviews and Permits

As the Lead Agency, the Village of Chestnut Ridge Village Board has primary responsibility for for reviewing a zoning amendment and determining its conformance with the Village's Comprehensive Plan and further determining the project proposal meets the requirements for the newly adopted zone. The proposed action will require approvals from the listed agencies (involved agencies):

Involved Agencies

New York State & Federal

Commissioner – Notice Only
NYS Department of Environmental Conservation
625 Broadway
Albany, NY 12233

Regional Permit Administrator - SWPPP Approval
NYS Department of Environmental Conservation
Region 3
21 South Putt Corners Road
New Paltz, NY 12561

US Army Corps of Engineers, NY District - Wetland Jurisdictional Determination
Attn: Regulatory Branch, Room 16-406
26 Federal Plaza
New York, NY 10278-0090

Rockland County

Patricia Schnabel Ruppert, Commissioner of Health – Board of Health Approval
Rockland County Department of Health
Robert L. Yeager Health Center
Building D, 50 Sanatorium Road
Pomona, NY 10970

Charles Vezzetti – Superintendent of Highways – Highway Work Permit
Rockland County Highway Department
23 New Hempstead Road
New City, New York 10956

Charles Vezzetti - RC Drainage Agency Permit
Rockland County Drainage Agency
23 New Hempstead Road
New City, New York 10956

Douglas Schuetz, Acting Commissioner – GML Review
Rockland County Planning Department
Robert L. Yeager Health Center
Building T, 50 Sanatorium Road,
Pomona, NY 10970

Rockland County Sewer District No. 1 – Sewer Permit
4 Route 340
Orangeburg, NY 10962

Village of Chestnut Ridge

Rosario Presti Jr., Mayor & Board of Trustees – Zone Amendment
Chestnut Ridge Village Hall
277 Old Nyack Turnpike
Chestnut Ridge, NY 10977

Allan Rubin – Chairman and Members of the Planning Board
Chestnut Ridge Planning Board – Site Plan Approval
Chestnut Ridge Village Hall
277 Old Nyack Turnpike
Chestnut Ridge, NY 10977

Town of Ramapo

Town of Ramapo
Department of Public Works
16 Pioneer Avenue
Tallman, NY 10982

1.8 Potential Environmental Impacts and Proposed Mitigation Measures

1.8.1 Geology, Soils & Topography

Geology

The project site is located in the eastern section of the New England physiographic province, more specifically the Triassic Lowlands, which is characterized topographically by broad gentle valleys and a moderate pattern of ridges. Local and regional geology has been mapped by the State of New York and is depicted on the Geologic Map of New York Lower Hudson Sheet (reprinted 1995). The bedrock identified on and near the project site is the Brunswick formation, located in the Newark Group. This rock consists of arkose, mudstone and conglomerate rocks.

According to the Surficial Geologic Map of New York, Lower Hudson Sheet (1989), the surficial deposits in the area of the project site consist of glacial tills. Tills are described as variable in texture (e.g. clay, silt-clay, boulder clay), that were deposited adjacent to melting glaciers. Glacial tills and the soils that derive from them predominate in the lower Hudson Valley.

Soils

Grading is required to construct the internal driveway network, install site utilities, prepare level areas for residential and mixed- use buildings and parking, and to create a stormwater management system. The wetlands identified on the site, including the stream corridor and the wetland in the southeast corner will be avoided.

The entire site is mapped as having the Wethersfield Gravelly Silt loam soil type. The disturbance for the currently proposed Site Plan is approximately 31.6 acres, all of which will occur in the WeB and WeD soil/slope categories. The total disturbance will leave approximately 8.0 acres, or 20 percent of the site, undisturbed.

Based upon preliminary engineering estimates, development of the Site Plan would involve a total of approximately 80,700 cubic yards of cut, 115,700 cubic yards of fill resulting in the need for approximately 35,000 cubic yards of material to be imported into the site. this effort would require an average of approximately 13 truckloads daily of soil be transported to the site over a three-month period of rough grading. The majority of the earth cuts would be located in the area of the stormwater facilities, and on slopes in the eastern portion of the site. Fill will occur primarily to level building pads and parking areas including the northern mixed-use building and in the eastern portion of the property. Excavation (cut) will be required to construct eight stormwater basins located across the subject property to facilitate stormwater management for the development.

Topography

There area of steep slope on the site (>25%) are located primarily along the stream corridor. There is limited disturbance proposed in these areas. Steeper slopes on the north and south sides of the stream corridor will require grading for stormwater management facilities. Steeper slopes in the southeast corner of the site will be disturbed for multifamily residences and the cul-de-sac in that area.

The potential for soil erosion and sedimentation will be minimized during the project construction by adhering to an approved Erosion Control Plan.

Proposed Mitigation Measures

A preliminary Stormwater Pollution Prevention Plan (SWPPP) has been prepared by Langan Engineering and is attached as Appendix D. The primary objective of the plan is to reduce soil erosion from areas exposed during construction and prevent silt from reaching off-site water bodies and areas downstream.

Prior to the disturbance of soils, erosion and sediment control measures would be installed in accordance with the specifications of the SWPPP. The construction contractor will be required to install all sediment and erosion control measures prior to ground disturbance and maintain them throughout the entire construction process. The project will be constructed in phases to limit disturbance on site to no more than 5 acres at a time.

The proposed plan minimizes the areal extent of soil exposure to the greatest extent practicable in accordance with the applicable Erosion and Sediment Control Guidelines of the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities (GP-0-20-001). Erosion and sedimentation will be controlled during the construction period by temporary devices according to the SWPPP developed specifically for this project.

1.8.2 Water Resources

Under the proposed plan, new access roads, townhouse units, commercial buildings and amenities will result in an increase in the amount of impervious surface on the site from 3.5 acres to 13.8 acres, and the disturbance of 31.6 acres of the site. A new, 24’ wide private road will be constructed that would add new areas of impervious surface. The old road bed would be abandoned, the pavement removed and where appropriate replaced by vegetative cover. Overall drainage patterns to the established design point are not expected to change.

Flow rates and volumes to all of the design points would increase following development (without mitigation) due to the creation of larger areas of impervious surface. If no mitigation practices were utilized, there would be a significant increase in both runoff rate and runoff volume following construction. However, the project engineer has developed a plan using bioretention basins, subsurface infiltration practices and a number of volume reduction practices to offset the changes in perviousness. Overall, the stormwater management plan designed for this project would reduce the peak flow of runoff from the site compared to the existing condition, so no flooding or other issues would be expected. The concept plan shows stormwater detention basins and other practices for each of the post-development catchment areas.

Proposed Mitigation

Design features have been incorporated into the project plans in order to minimize off-site water quality impacts from the project, as per the requirements of the applicable NYSDEC General Permit for Stormwater Discharges from Construction Activity.

The project engineer proposes the use of bioretention basins and underground infiltration systems in conjunction with extended detention basins to mitigate the increases in stormwater quantity and address the water quality volume. These practices are distributed throughout the site and will reduce flow rates to below that of current conditions.

Structural sediment and erosion control features include: the construction of temporary swales, earthen dikes and use of temporary sediment basins for control of stormwater. Temporary construction accesses will be provided, and a sequencing plan that includes the use of silt fence, inlet protection, temporary soil stockpiles and other practices is described in the SWPPP. At the conclusion of construction, the sediment basins will be cleaned and all sediment will be properly disposed

Stormwater drainage from the site during construction will be strictly managed to avoid off-site impacts. A key aspect in the maintenance of stormwater quality and the control of soil erosion is the proper sequencing of construction. All structural sediment and erosion control features will be installed prior to the commencement of grading and earthwork.

Erosion control measures appropriate to the proposed construction activities shall be specified in accordance with the *NY Standards and Specifications for Erosion and Sediment Control* so as to minimize erosion during the construction phase.

Stormwater quantity and quality control measures designed in accordance with the *NYS Stormwater Design Manual* so as to appropriately manage stormwater in the built project. These measures are specified in the project-specific Stormwater Management Plan (Appendix D).

1.8.3 Ecology & Wetlands

The development plan involves clearing and grading disturbance to approximately 31.6 acres of the 39.6-acre project site for the creation of three new parcels. The remaining 8 acres will remain undisturbed lands. Of the disturbance area, approximately 10 acres is previously disturbed land associated with the vehicle storage lot, warehouse building, driveway and three existing residences on the site. The remainder of the disturbance area is currently stream corridor, woodland and open meadow.

Two areas that meet the federal definition of regulated wetlands or watercourses were delineated on the property. No New York State wetlands are mapped on the site.

Wetland A (37,840 sf) is associated with an intermittent stream corridor that traverses the site from west to east, beginning at a culvert under Red Schoolhouse Road. The stream flows through the site in a deep, well defined channel until reaching a large culvert just west of South Pascack Road. There is no significant wetland vegetation within the stream corridor, but rather common streambank and transitional species such as red maple, hornbeam, black birch and winged euonymus. Soils are generally coarse sand and gravel within the stream corridor. The stream ultimately discharges to the Pascack Brook to the west via the municipal drainage system.

Wetland A provides flood and erosion protection by way of its deep channel and stabilized banks. The stream bottom likely provides some habitat for small amphibians and macroinvertebrates. The stony stream bottom causes aeration of the water as it flows by, improving water quality to receiving waters downstream.

Wetland B (21,216 sf) is located in an opening in the canopy at the corner of Gary Drive and South Pascack Road, and is derived from hillside seepage and shallow lateral flow. Dominant vegetation species in Wetland B are red maple, spicebush, soft rush and tussock sedge. Soils are generally sandy loams with dense organic matter at the surface, saturated by the discharge of the groundwater flow. Water exits the wetland via a culvert under Gary Drive, ultimately discharging to the Pascack Brook to the east.

Wetland B provides a discharge point for the lateral subsurface flow of the watershed, created a saturated surface that provides some habitat for macroinvertebrates and a more diverse vegetation community than on other parts of the site.

no protected plant species are known or expected to occur on the project site. A biological assessment field survey was conducted by a TMA biologist in October 2020 and no species nor habitat for rare or protected species was observed. Therefore, no impacts to rare or protected plant species are anticipated as a result of the proposed action. The site is not known to provide habitat for any wildlife species listed as endangered or threatened by the New York State Department of Environmental Conservation. Therefore, no significant adverse impacts to protected wildlife species are anticipated.

Proposed Mitigation

No direct impacts to wetlands are proposed. The location of the stream crossing to access the senior housing was chosen to utilize the existing crossing, and will be a structure that will not require fill or diversion of the watercourse channel. The driveway access to one of the proposed homes on Gary Drive will similarly not directly impact Wetland B.

Although not as valuable as natural undisturbed habitat, the mixture of ornamental and native landscaping plants, that will be planted to re-vegetate disturbed areas adjacent to the residences would provide some benefit to wildlife species that can adapt to suburban environments. Many of these plants provide a certain degree of wildlife value such as food and nesting opportunities.

To reduce potential impacts to the on-site wetland habitat, as well as to protect off-site undisturbed natural areas, the following mitigation measures are proposed to reduce the potential for soil erosion and sedimentation to these areas. The stormwater management system is designed to ensure that the existing water quality of the stream that flows through the site is not degraded.

- Erosion and sediment controls would be utilized throughout the construction phase of the project until all disturbed area are fully developed or soils have been stabilized through vegetation plantings or other means.

- Introduction of a stormwater management system that would provide appropriate water quality treatment and would meet the criteria of the applicable New York State General Permit for stormwater discharge from a construction activity.

With the implementation of the proposed stormwater and erosion control measures, the proposed project would not adversely impact the quantity or quality of on-site or off-site surface water resources. In fact, the proposed project would result in reductions in the existing levels of sediment, phosphorous, nitrogen, and Biochemical Oxygen Demand (BOD) in stormwater runoff from the project site following the treatment of stormwater runoff by a variety of proposed stormwater best management practices

1.8.4 Land Use

The proposed Equestrian Estates Project would create a mixed-use development including up to 62 duplex townhouse units; plus 84 rental flats above the retail building on Red Schoolhouse Road; up to 118 senior residential rental units (at least half of which will be limited to those aged 55 and older); and two single family homes in the vicinity of Gary Drive. Thus, the project proposes a total of 266 residential units on 39.6-acre site resulting in an overall density of less than 7 units per acre.

The mixed use multifamily/office/retail development is being proposed to provide a core nucleus to the Village of Chestnut Ridge. The project is composed of a mix of housing types including market rate duplex townhouses; market rate rental units to accommodate the needs of millennials, other young professionals and others who prefer rental housing; and market rate senior rental housing in two adjacent buildings to foster socialization among the senior residents. There is a continued demand for the quality of life and maintenance free lifestyle that accompanies townhouse and rental living. The senior development will offer moderately priced senior citizen housing in the Village of Chestnut Ridge and the Rockland County region. It is the project sponsor's intent to develop a mixed-use community that accommodates the needs of a variety of residents.

This proposed development would commit the 39.6 acres to mixed use development and preclude alternative uses of the site.

The combination of residential and retail/office uses in a single development will result in a walkable, compact integrated community. The community center will offer recreation opportunities for the residents of all the housing types encouraging socialization among all residents fostering a sense of community. The retail center will provide goods and services to support the needs of residential development and the residential population will provide a ready market to support the various retail establishments. Development in this area is well positioned based upon the excellent access provided by the NY Thruway and the Garden State Parkway connection in close proximity.

1.8.5 Zoning

As stated in the draft Village Comprehensive Plan (Plan), the LO zone has been underutilized. The regional demand for the development of Laboratory Office building types appears to be limited, and parcels currently zoned LO in areas with excellent transportation access have remained vacant for many years. As the Plan states, the current Laboratory Office (LO) zoning is not useful, as it does not allow warehouse or light assembly types of uses, which the market is demanding. The Comprehensive Plan recommends an adjustment to the zoning in this area through a zone amendment which would create a PI/LO zone that would permit more industrial type uses such as self-storage, warehousing, flex space etc. Parcels currently zoned LO could be considered for this PI/LO zoning. Alternatively, the Comprehensive Plan recommends the creation of Planned Unit Development zoning or a PUD as described below.

The current residential zones allow for a single housing unit on a single lot, which provides a limited number of houses and creates an inefficient use of open space; a pattern that leads to suburban sprawl. The Village also has 6 non-residential zones NS, RS, LO, PO, and PI; but there are no zones that permit Townhouses or any sort of mixed-use developments.

How a PUD Development differs from a Standard proposal.

A PUD Development site typically contains a mix of interrelated uses. P U D stands for Planned Unit Development where the merits of a development scheme are looked at as a cohesive unit. Typical Euclidian zoning attempts to predict where conditions are best for a particular type of use, for example putting commercial zones along major roadways or at intersections, which seems obvious. It also puts industrial zones out of the way, or office zones off the beaten path. It is a predetermination of what land use should be without any specific land development proposal. However, in order for the land to actually be developed, an applicant has to come forward with a proposal. Then there is also the issue of transitions from one type of land use to the next.

A PUD development plan looks at a system of uses that complement one another and places them in a single project. This gives the municipality an opportunity to look at the entire scheme that is actually proposed for development and decide if the development is appropriate for their community. In Chestnut Ridge, the Village's planners have recommended a PUD be created in this area and that it be implemented as a floating zone. This provides the Village an opportunity to review a development proposal that meets the criteria and determine if they are interested or not. Only after the Village has reviewed the development proposal would they then proceed to map the floating zone in an area that has been determined to be acceptable. The Village would have a choice to determine if it is the right mix of uses for a particular area in advance of making any decision.

As proposed, there are general requirements that the PUD development must adhere to. At the Village's discretion, the Planned Unit Development Zone Designation may be applied to properties in the Village that meet the following criteria;

- Minimum Lot Size: 25 acres
- Minimum Lot width: 250'
- Must have municipal water and sewer service available.
- Must be located along a NYS or County Road
- Must be located in an area served by public transportation.
- Must be located within 0.5 miles of an interchange for an Interstate Highway, as measured along a New York State or Rockland County Road.

(This last requirement will specifically locate PUD opportunities in the southern portion of the Village; and preclude them from the central portion along Route 45.)

In addition, there are general bulk requirements that the PUD development must adhere to. The full text of the proposed zone amendment is included as Appendix B.

Proposed Mitigation

The proposed action would be compatible with surrounding land use patterns in the vicinity of the project site. The construction of the proposed development would increase the diversity of housing options in the Village of Chestnut Ridge and would serve to expand the Village tax base with additional ratables. No significant adverse impacts are expected from the proposed action on adjacent land uses.

No significant land use impacts are anticipated. In addition, the project is consistent with the goals of the Comprehensive Plans of the Village and County, and no impacts on public policy are anticipated. With regard to zoning impacts, the project is fully compliant with the proposed PUD bulk and use regulations.

1.8.6 Demographics & Fiscal Resources

Demographic multipliers published by the Rutgers University Center for Urban Policy Research (CUPR) were used to project the future population of the Equestrian Estates Mixed Use project, Demographic multipliers of 2.83 persons were used to project the population for the 3-BR single family duplex units. Demographic multipliers of 2.31 persons were used to project the population for the 2-BR apartments and includes 0.23 school age children (SAC) per unit. Based upon the age restricted nature of the senior rental apartments, a multiplier of 1.8 persons per two-bedroom unit has been used to project the senior population. Based upon the residential multipliers, approximately 651 persons are projected to reside in the proposed housing including approximately 95 school age children.

The current assessed value of the total project site is $681,300. According to a review of the 2021 tax bills for the subject parcel, the total annual property taxes generated by the project site and paid to the Village of Chestnut Ridge are $8,214. The municipal taxes paid to the Town of Ramapo are $44,878. The municipal taxes paid to Rockland County are $18,436. Thus, the total municipal taxes paid are $71,527 while the annual property taxes paid to the East Ramapo Central School District are $84,938.

As presented in Table 1-1, at today's tax rates annual revenues to the Village of Chestnut Ridge would be approximately $116,129. Revenues to the Town of Ramapo would total $966,516. The project-generated annual revenues to Rockland County would be approximately $260,653 annually.

Table 1-1
Current & Projected Taxes Generated by Equestrian Estates Development

Taxing Authority	Current Taxes ($)	Equestrian Estates Projected Taxes Total ($)	Net Increase Between Current & Projected Taxes ($)
Total Rockland County	**$18,436**	**$260,653**	**$242,217**
Total Town of Ramapo	**$44,878**	**$966,516**	**$921,638**
Total Village of Chestnut Ridge	**$8,214**	**$116,129**	**$107,915**
Total Municipal	**$71,527**	**$1,343,298**	**$1,271,771**
East Ramapo Central School District	**$84,938**	**$1,200,872**	**$1,115,935**
TOTAL	**$156,465**	**$2,544,170**	**$2,387,705**

Notes:
(1) Tax Rate per $1,000 of Assessed Valuation.
Municipal taxes are based upon Village of Chestnut Ridge 2020/2021 Tax Rates.
East Ramapo Central School Tax Rates are for the 2020-2021 school year.

Table 1-2 presents a summary of the conservatively anticipated revenues compared to an estimate of costs of the proposed Equestrian Estates development project. The combined net positive revenues, after considering the generalized costs to the Village, Town and the School District is an annual amount of $1,226,312 to all taxing jurisdictions.

Table 1-2
Revenue & Cost Summary: Equestrian Estates Mixed Use Development

Jurisdiction	Projected Taxes ($)	Projected Costs ($)	Net Tax Revenue
Village of Chestnut Ridge	$116,129	($24,087)	$92,042
Town of Ramapo	$966,516	($113,925)	$852,591
East Ramapo Central Schools	$1,200,872	($919,030)	$281,842
Total	**$2,283,517**	**($1,057,205)**	**$1,226,312**

Source: Tim Miller Associates, Inc., 2019

The proposed Equestrian Estates development will provide a diversity of housing in the Village of Chestnut Ridge, in addition to an increase in new retail opportunities. As a result of this project the community will realize the following economic benefits:

- Collective municipal and school revenues are projected to total approximately $2,544,170 annually.
- Tax revenue to the School District will increase by approximately $1,115,935, and result in an annual net benefit to the district *after covering costs* by more than $280,000.
- The project will result in net benefit revenue to the Village of more than $92,000 annually.
- The project-generated annual revenues to Rockland County would be approximately $260,653 annually.
- Retail spending by the new residents of the community is projected to exceed $8 million annually.

The project would generate about 300 full time equivalent jobs in the various construction trades associated with this project and approximately 136 full time jobs upon completion.

1.8.7 Community Services

Police Department

The Police Department was contacted with regard to the proposed Equestrian Estates development. Police Chief Brad Weidel indicates the proposed Equestrian Estates development will likely result in an increase in the number of calls for service and may necessitate the need for additional police resources.

Based on planning standards contained in the ULI Handbook, model factors for police protection recommend two (2) police personnel per 1,000 persons which further breaks down to 1.5 police personnel per 1,000 persons for residential uses and 0.5 police personnel per 1,000 persons for

nonresidential uses. Based on this standard, 651 persons would increase police staffing needs by approximately 1.4 police officers. The anticipated population increase of less than ½ of one percent of the Town's population would not significantly affect the Town of Ramapo's police personnel ratio of 0.87 personnel per 1,000 residents.

Fire Department

Based on planning standards published in the ULI Handbook, approximately 1.65 fire department personnel per 1,000 population is recommended to provide adequate fire protection service. An increase in population of 651 new residents would generate demand for an additional 1.1 fire department personnel. The project would generate $115,493 in annual property tax revenues to the fire district to offset the additional demand.

The Equestrian Estates development would be accessed via private roads, a minimum of 24' wide. Turning radius for emergency vehicles is shown on the full-size plan set and has been designed to accommodate emergency service vehicles. Fire hydrants would be installed according to Village standards.

A letter was sent to the Hugh Gassner Fire Department on November 16, 2020. No response from the fire department has been received as of this publication. The Fire Chief and company will be notified of the public hearing(s) to be held on this development and will have an opportunity to submit comments.

Emergency Medical Service

The total population increase is 651 persons, of which 245 are anticipated to be senior citizens. Based on planning standards contained in the ULI Handbook, approximately 36.5 calls for emergency medical service per 1,000 general mixed population are made annually. For dedicated Senior housing this rate can be twice as many calls or 73 calls per 1,000 population. Based on these standards, the 439 persons plus 245 senior residents may increase EMS calls by approximately 34 calls annually on average.

A letter was received from the William P. Faist Volunteer Ambulance Corp. dated January 3, 2021 indicating they did not have any concerns to share. The Ambulance Corp will be notified of the public hearing(s) to be held on this development and will have an opportunity to submit additional comments if necessary.

Hospital

Based on planning standards contained in the ULI Handbook, four (4.0) hospital beds should be provided per 1,000 persons. Based on this standard, the projected population increase associated with the Equestrian Estates development has the potential to increase the need for beds in hospitals serving the Rockland County area by less than 3 beds or less than half of a percent increase compared to the 636 hospital beds readily available in the area. This is not considered a significant impact.

Sewers

Based upon a review of the proposed Equestrian Estates, the Staff for Rockland County Sewer District #1, have determined that under the existing zoning, collectively the parcels which comprise Equestrian Estates, under a maximum buildout scenario of both the R-35 District and the LO district, would be eligible to utilize a total of 145 sewer units.

Pursuant to the Sewer Use Law, the District assesses one sewer unit for each residential unit. The residential portion of the proposal amounts to 84+62+118=264 units. At 0.1 gpd/sf and 400 gpd/unit, the 45,500 square feet retail/commercial space amounts to 12 units. Thus, the proposed Equestrian Estates project will utilize 276 sewer units. As shown in Table 3.6-1, sewer entitlement of a maximum buildout under the existing zoning is 145 sewer units, thus the Equestrian Estates project will be assessed an impact fee on an additional 131 units.

Proposed Mitigation

Police

As stated by Police Chief Brad Weidel, there may be an increase in the need for police services as a result of the construction of the Equestrian Estates development. It is projected that the Town of Ramapo will receive an increase in tax revenue of $283,000 annually, allocated to the Police department which will help to offset any increase in the need for police protection services.

Fire and Emergency Services

Roadway access and design will allow full access for emergency service vehicles from both the northbound and southbound directions on Red Schoolhouse Road. Internal roadways will be wide enough to accommodate two-way vehicle traffic including fire trucks and other emergency service vehicles.

Water for fire protection is available from the municipal water service provided in Red Schoolhouse Road and can be supplemented, if necessary, from the fire department's pumper trucks. Additionally, each residential unit plus the commercial space will be fully sprinklered and will have emergency generator back-up of their sprinkler systems, in accordance with code requirements. Plans will be submitted for review and approval by the Fire Inspector and the Fire Department prior to final site plan approval, to ensure that adequate fire protection service is available to the development.

There are separate fire and ambulance districts for these emergency providers, which are funded, in part, by real property taxes.

The project would generate $115,493 in annual property tax revenues to the Hugh Gassner Fire department. These funds could be used to help offset any increase in the need for fire protection services.

In addition, the project would generate $27,260 in annual property tax revenues to the ambulance corp. These funds could be used to help offset any increase in the need for ambulance services.

With these mitigation measures in place, no significant impact is anticipated to fire and emergency service as a result of the construction of the Equestrian Estates development.

Sewers

Consistent with the requirements set forth in the letter received from the Rockland County Sewer District #1, the applicant will pay the sewer impact fee, currently assessed at $242,350 prior to final site plan approval.

1.8.8 Traffic & Transportation

The Primary arterial roadway in this area is Red Schoolhouse Road connecting NYS Route 45 (Chestnut Ridge Road) with partial access to the Garden State Parkway / New York State Thruway and continuing south into Montvale New Jersey. The majority of vacant and developable land in Chestnut Ridge is located along this corridor. A number of development proposals along Red Schoolhouse Road are currently before the Village of Chestnut Ridge. In order to evaluate the cumulative impact of the collective development, the Village initiated a joint Transportation Improvement Study to provide an impartial analysis of the future traffic conditions along this corridor and to identify a program of planned improvements that would result in acceptable traffic operating conditions upon full build-out of the various development proposals.

A Traffic Impact Study (located in Appendix E of this DEIS) was prepared by Maser Consulting, dated February 3, 2021; to discuss existing traffic conditions; to evaluate intersections where the level of service with respect to traffic may be impacted by the cumulative proposed development along the corridor; and to identify an appropriate program of recommended improvements to achieve acceptable operating conditions along Red Schoolhouse Road.

In conducting the Traffic Impact Study, Maser Consulting gathered all available traffic count data for the study area intersections from reports prepared by various traffic consultants that have completed studies in the area. These data were supplemented with new traffic counts collected by representatives of Maser Consulting. These data were also compared to historical traffic volume data obtained from the NYSDOT and RCHD to adjust and account for the effects of the COVID-19 pandemic on traffic in the area. Together these data were utilized to establish the Existing Traffic Volumes representing existing traffic conditions

The Existing Traffic Volumes were then projected to the 2025 Design Year to take into account background traffic growth to obtain the Year 2025 No-Build Traffic Volumes.

Estimates were then made of the potential traffic that the significant proposed/pending area developments (including the subject Project) would generate during each of the peak hours. The resulting site generated traffic volumes for these developments were then added to the roadway system and combined with the Year 2025 No-Build Traffic Volumes resulting in the Year 2025 Build Traffic Volumes.

The Existing, No-Build and Build Traffic Volumes were compared to roadway capacities based on the procedures from the Highway Capacity Manual to determine existing and future Levels of Service and operating conditions based on the Synchro analysis procedures.

Recommendations for improvements were made where necessary to serve the existing and/or future traffic volumes. As described in more detail in the Traffic Impact Study, both interim and longer-term improvements were identified.

A series of improvement alternatives have been identified as a result of the analysis contained in the TIS. These improvements include geometric modifications including turning lanes, sidewalks, signal timing modifications, additional signal installations, upgraded and improved signal actuation as well as a potential roundabout. Due to the nature of some of the improvements and the potential regulatory approvals as well as associated cost implications of such, it is recommended that a phased or “building blocks” approach be considered to allow these to be implemented at individual intersections but in manner that they will work towards the completion of the overall corridor plan. Furthermore, some of the recommended project access

related improvements should be tied to the specific planned developments along the corridor, while other improvements should be approached on a longer-term basis due to the requirements for R.O.W. acquisition, funding, and regulatory approvals. Conceptual plans for the potential corridor improvements were prepared using available aerial images, roadway record plan information, tax maps, and site plan information from the various development applications. More detailed design plans based on detailed roadway surveys and identifying any environmental, R.O.W., or other constraints will have to be completed for the permitting and construction of such improvements as they proceed.

In an effort to address the recommendations of the RSHR Transportation Improvement Study (TIS), a committee of the traffic and civil engineers, plus the legal representatives and project managers of the various stakeholders was convened to digest the results of the study and to take ownership of the various recommended improvements the study identified in order to facilitate improvements to the future traffic operations along the RSHR Corridor. The Recommended Program of Improvements listed below was agreed to by the committee and represents a collective significant contribution toward infrastructure improvements along this corridor. Figure 3.7-2 illustrates the commitment of various stakeholders to implement these improvements.

NORTH OF THE GARDEN STATE PARKWAY (GSP)

- Dedication of the land opposite the GSP SB off ramp to accommodate construction of future dual left turn lanes off the GSP SB off ramp (Wellington from Summit to DiSalvo = 1,700 feet +/-.
- Dedication of the land to accommodate separate left turn lanes northbound and southbound on RSHR near Wellington Schools access.
- Construction of separate left turn lanes northbound and southbound on RSHR near Wellington Schools access.
- Construction of Sidewalks per the recommendation of Rockland County Highway Dept.

SOUTH OF THE GARDEN STATE PARKWAY (GSP)

- Widen RSHR to provide separate channelized NB right turn lane at GSP NB on ramp
- Construct a NB Thru/Right turn lane “starting 200’ south of Sephar lane continuing through that intersection and up to the GSP NB On Ramp”.
- Install Traffic signal at Sephar Lane to permit protected LT inbound and outbound movements from Commerce Corporate Park (CCP).
- Dedication of Sephar Lane to the Village of Chestnut Ridge.
- Provision of an easement from both CCP and Equestrian Estates to accommodate a future connection with the Chestnut Ridge Transportation parcel.
- Construction of a 4-way intersection with widening of RSHR to provide dedicated right and left turn lanes at Triangle Properties/Equestrian Estates as needed.
- Install new traffic signal at Triangle Properties/Equestrian Estates main access.
- Construction of a roundabout at Triangle Properties/Equestrian Estates northern access.
- Left turn lane widening at Loescher Lane to facilitate future development of Horse farm Property.

REGIONAL

- Modify or Replace traffic signal at RSHR and GSP SB off Ramp.
- Widen ramp to provide dual left turn lanes on GSP Exit including two lane receiver on SB RSHR.

Of this total list of Program of Improvements, shown in Blue on Figure 3.7-2, the Equestrian Estates Development is assuming responsibility for the following;

- Provision of an easement from both CCP and Equestrian Estates to accommodate a future connection with the Chestnut Ridge Transportation parcel.
- Construction of a 4-way intersection with widening of RSHR to provide dedicated right and left turn lanes at Triangle Properties/Equestrian Estates as needed.
- Installation of a new traffic signal at Triangle Properties/Equestrian Estates main access.
- Construction of a roundabout to alleviate congestion from potential left turners to serve the entire corridor at the Triangle Properties/Equestrian Estates northern access.

Table 1-3 below provides a summary of the overall level of service that can be expected upon completion of the recommended improvements for those intersections directly affected by the Equestrian Estates Development.

Table 1-3
2025 BUILD WITH IMPROVEMENTS CONDITION compared to
2025 NO BUILD CONDITION

LEVEL OF SERVICE SUMMARY

INTERSECTION	WEEKDAY AM PEAK HOUR		WEEKDAY PM PEAK HOUR		SATURDAY PEAK HOUR	
	No Build	Build With Improvements	No Build	Build With Improvements	No Build	Build With Improvements
RED SCHOOLHOUSE RD/ GSP SB EXIT RAMP	C [25.1]	B [11.9]	B [14.6]	A [8.8]	B [15.4]	A [7.7]
RED SCHOOLHOUSE RD/ GSP NORTHBOUND ENTRANCE RAMP	90.4%*	77.3%*	109.9%*	80.7%*	61.6%*	46.6%*
RED SCHOOLHOUSE RD/ SEPHAR LANE	C [19.2]	A [7.0]**	C [24.8]	B [11.6]**	B [13.3]	A***
RED SCHOOLHOUSE RD/ EQUESTRIAN ESTATES/ TRIANGLE PROPERTY MAIN ACCESS****	---	C [33.5]	---	B [16.2]	---	B [12.3]
RED SCHOOLHOUSE RD/ LOESCHER LN (FUTURE HORSE FARM DEV.)****	C [19.2]	E [35.6]	C [24.8]	F [61.6]	B [13.2]	C [18.5]

* Level of service delay was not determined in the Corridor Study. Intersection Capacity Utilization from the Corridor Study provides an indication that the intersection operation ability to handle traffic will improve as a result of the improvements.

**Build Condition with improvements weekdays based on signal control as analyzed by Chazen for improvements not contained in the Red School House Road Corridor Study.

*** Projected not analyzed. As a commercial business little or no traffic on Sephar Lane expected Saturday.

****Build Condition volumes revised for Triangle Properties and Equestrian Estates. Intersection design from Corridor Study subject to change.

1.8.9 Historic & Archaeological Resources

The most significant impact to known cultural resources from the proposed development involves the demolition of two standing historic residential structures. The lesser of the two structures is a stone-faced house. The vernacular style is unremarkable and does not appear to warrant further investigation. More significant is the Queen Anne-style shingle residence which appears to be of pre-WWI vintage and retains a high degree of integrity. Numerous leaded-glass windows and a lack of modification suggest that the house is a good example of early 20th-century architecture for the area. The residence is currently occupied and no detailed assessment of the house has yet been made. The exterior architectural integrity hints at the possibility of high integrity for the interior of the house as well. A more in-depth evaluation of the house is warranted during the Phase IB fieldwork. Recent efforts to contact the village historian for more information regarding the house were unsuccessful. Possible mitigation efforts could include photo documentation and eventual architectural salvage of vintage elements. However, the house does not appear to warrant preservation and its location at the center of one of the proposed Senior Housing apartments does not allow for avoidance. The proposed mitigation measures would be enacted prior to demolition of the structure.

Pre-Historic Sensitivity

The Project Area is considered to have moderate sensitivity for the presence of prehistoric cultural remains. The small brook would have provided potable water and may have hosted short-term hunting camps while the larger settlements would have likely been in the nearby flats around Pascack Brook. No lithic materials or outcrops were observed within the Project Area.

Historic Sensitivity

The Project Area is considered to have moderate to high sensitivity for the presence of historic cultural remains. Several early 20th-century residences appear on historic maps including two extant houses that are proposed for removal. The cellar hole for MDS 3 was also observed indicating the possible presence of buried deposits.

Testing Recommendations

Based on the sensitivity for the presence of both precontact and historic cultural resources a Phase IB Field Investigation is warranted. Shovel testing should be performed across the entire property excepting areas of wetlands and steep slopes. Closer interval testing around MDS 2 will investigate for subsurface deposits related to the development and occupation of the historic house.

Conclusions and Recommendations

- The Phase 1A has determined that based upon topographic characteristics and proximity to the stream corridor, the property was assessed as having a moderate potential for encountering prehistoric sites.
- Based upon topographic characteristics and proximity to the stream corridor, and map documented structures, the property was assessed as having moderate to high potential for encountering historic sites.

Potential for Impacts from the Proposed Project

Potential Impacts with respect to archeological resources consist of the potential loss of these resources during land disturbance activity that requires excavation.

Proposed Mitigation

The House to be removed will be fully documented prior to demolition. This documentation will be submitted to the New York State Office of Historic Preservation to be archived.

1.8.10 Aesthetic Resources

Existing Visual Character

Red Schoolhouse Road abuts the site on a portion of the western frontage. There is a small frontage of the eastern boundary which abuts South Pascack Road. The northern and southern boundaries abut other interior parcels, with an automotive storage facility directly to the north on the west side and vacant second growth wooded land along the majority of the northern boundary. To the south is the Saddle River Equestrian Center.

Potential Impacts

View 1: From Red Schoolhouse Road

As shown in Figure 3.9-1B, the post development view along Red Schoolhouse Road will be of the beautifully landscaped main entrance to Equestrian Estates. The buildings are set back from the road to provide an open airy feeling to the development. The first-floor retail will be subtly visible from Red Schoolhouse Road without dominating the visual scene. Views of the pedestrian spine to the development will be visible from this vantage point.

View 2: From Loescher Lane

Loescher Lane provides the secondary access to Equestrian Estates. As shown in Figure 3.9-2B, this view is predominantly of the community of semi-attached duplex units. The feeling at this location is of a neighborhood community. Tree clearing and removal of the understory will be necessary to develop these deluxe townhouse units. Since the units will be part of a home owners association responsible for landscape maintenance, a clean, trim well-kept neighborhood can be expected.

View 3: From Lance Court

A 75-foot vegetated buffer of existing second growth is to be preserved along the sites eastern border. This will effectively screen the view of the rear of the townhouse units from existing residences along Lance Court. During off leaf conditions views through the 75 feet of woods may reveal the back yards of the townhouse units along Entrance Road A as shown in Figure 3.9-3B.

View 4: From The end of Ronwood Road

Beyond the western end of Ronwood Road, is an area of the site that rises up toward Ronwood Road. This area is to be left undeveloped and utilized as open space or a nature trail. View of the existing second growth forest will remain intact from this vantage point.

View 5: From Chestnut Ridge Transportation

The view south from the parcel utilized by the Chestnut Ridge Transportation Company will include the rear of the proposed Senior housing. As Figure 3.9-5B shows, Site Plan design includes substantial landscape screening along this property line. The new landscaping will be combined with existing trees to offer buffer protection.

Proposed Mitigation

Site Design

The site design for the proposed development would locate the mixed use/retail building with frontage along Red Schoolhouse Road, while the duplex townhouses would be clustered in the central portion of the property. This layout would allow for the preservation of existing trees, and topography throughout the site. A Conceptual Landscaping plan will be developed to retain existing forested areas as far as practicable, providing screening of the developed areas within the interior of the site. The foregoing discussion demonstrates that the proposed project would not obstruct any existing scenic view.

Architecture

Architecture for the Equestrian Estates Development would be developed more fully during the review process to respond to requirements and goals of the Village. Representative architecture is shown in the set of architect's renderings in Figures 3.9-7 through 3.9-13. The project sponsor is committed to selecting residential architectural styles that complement the most pleasing examples in the community. Colors and materials would be chosen to integrate the buildings with the natural landscape and the character of the locale. The architect's renderings shown in Figures 3.9-7 through 3.9-13 illustrate the potential visual character of the development. The proposed architectural design, colors, and materials are subject to review and approval by the Village architectural review board and planning board.

Landscaping

A Conceptual Landscaping Plan will be developed to blend a naturalistic parklike feel with the more manicured areas of the site. The landscaping will be placed to effectively screen the development from the surrounding properties. The project includes an extensive system of walkways to facilitate pedestrian circulation around the project site which will be landscaped and include finishing elements to establish a sense of place. The proposed landscaping plan is subject to review and approval by the Village planning board.

1.8.11 Energy

Energy consumption will occur during construction and occupancy of the proposed residences and commercial space. During construction, energy will be used to power equipment and construction vehicles. The residences and commercial space will consume energy for space heating, air conditioning, lighting, household appliances and other electrical devices once occupied.

Electricity and gas for the Equestrian Estates development will be provided by Orange and Rockland Utilities from an underground distribution system that will be constructed to distribute electricity to the development. Actual electrical and gas demands may vary considerably based upon the lifestyles and habits of the residential occupants.

The 266 dwelling units would be inhabited by households that would place demand on various energy sources. In a residential dwelling, energy is consumed for space heating, air-conditioning, water heating, refrigerators, appliances and lighting. According to data published by the US Department of Energy, approximately 125 million BTUs are consumed per household annually in New York State. It is expected that 266 households would consume 33.250 billion BTU[1] of energy annually.

Energy conservation is regulated at the state level. The design and plans for residential buildings must comply with the New York State Energy Conservation Construction Code.

The code specifies basic requirements that are mandatory for all residential buildings. Requirements apply to heating and cooling systems, the hot water system, electrical system, material and equipment specifications and, sealing the building envelope.

With regard to the design of building envelopes, the NYS Energy code requires that:

- insulation R-values and glazing and door U-factors be certified by the National Fenestration Rating Council (NFRC) or by using default values found in tables published in the Code.
- vapor retarders be installed in non-vented framed ceiling, wall, and floor areas.
- insulation levels for walls, roofs, and below-grade walls and glazing areas, and U-factors for windows and skylights meet or exceed minimum efficiency levels.
- air leakage be limited through the building envelope.

The NYS Energy Code also requires that water and air cooling and heating mechanical systems and equipment comply with code, and compliance is dependent on the type of mechanical equipment proposed.

Based on statistics compiled by the U.S. Energy Information Administration 2009 Residential Energy Consumption Survey (RECS)[2], it is anticipated that, once construction is complete, the project will demand 200,000 kilowatt hours of electricity per month (2.4 MWhrs a year).

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[1] *BTU, or British Thermal Unit, is a unit of heat equal to the amount of heat required to raise one pound of water one-degree Fahrenheit at one atmosphere pressure; equivalent to 251.997 calories.*

[2] *U.S. Energy Information Administration 2009 Residential Energy Consumption Survey (RECS) indicates 1,100 kwh per Single family home; 525 kwh per 2 BR Multifamily unit.*

Based upon a review of billing records from Con Edison, the parent company for Orange and Rockland Utilities, Inc, it is estimated that gas usage for a Townhouse Duplex unit would be approximately 450 therms annually; and that each apartment or senior housing unit would use 300 therms annually. Collectively this would result in a combined usage of 88,500 therms annually for the proposed Equestrian Estates.

In terms of lighting standards, the NYS Energy Code requires:

- manual or automatic controls or switches that allow occupants to dim lights and turn them on or off when appropriate. The Code identifies control, switching, and wiring requirements that apply to all buildings.

- total connected loads for indoor lighting systems that do not exceed power allowances for a building. The Code demonstrates how to comply with interior-lighting power limits.

- energy-efficient exterior lighting. The Code specifies criteria for complying with exterior-lighting requirements.

The Equestrian Estates project will exceed the requirements of the NYS Energy Conservation Construction Code through the installation of high efficiency lighting fixtures.

The preservation of resources and energy sustainability is enhanced through the request for a zone change to allow for a higher density development of the site to meet the Villages' identified need for a diversity of housing.

Proposed Mitigation

In an effort to further reduce the energy consumption needs of the proposed project, the following measures incorporated into the project design;

Green building initiatives as listed below, including the consideration of solar panels and other alternative energy sources, will help to reduce the overall carbon footprint of the project;

The LEED (Leadership in Energy and Environmental Design) program has a varied list of design elements in which credits are applied to achieve various LEED certifications, this includes building material design and energy usage. In an effort to promote energy conservation, LEED program credits will be incorporated into the architectural and site design where practical; however, full LEED certification is not anticipated at this time. In addition to the building materials specified above, LEED measures that will be included relate to construction techniques, materials selection, and operational practices which reduce environmental impact, energy consumption, natural resource usage, and provide a better quality of life for the occupants and the surrounding community. Examples of the measures included in the project design include;

- Maximize Open Space - The project consists of 20% open space.
- Construction Activity Pollution Prevention – SWPPP - Erosion control measures will be incorporated into the final Storm Water Pollution Prevention Plan (SWPPP).
- Development Density and Community Connectivity - The site satisfies the Community Connectivity requirements for proximity to services and high-density residential development.

- Alternative Transportation - Public Transportation Access - The project site is next to a bus stop and is located within proximity to a commuter rail station.
- Stormwater Design - Quantity Control - The stormwater management plan will reduce peak discharge rates and quantity from the predevelopment rates and quantity for the specified storm events
- Stormwater Design - Quality Control – The project's SWPPP provides for water quality control.
- Exterior Light Pollution Reduction – Areas will be lit as necessary for comfort and safety without resulting in off-site light spillage.
- Use of energy efficient exterior and interior lighting fixtures.
- Use of energy efficient HVAC systems.
- Use of high efficiency double pane windows
- Installation of individual unit energy metering.
- Use of energy efficient insulation in excess of code requirements.
- Installation of individual unit energy metering.
- Water Use Reduction – Low flow fixtures will be used to reduce water usage by 25%.
- Water Efficient Landscaping - Water consumption for irrigation is expected to be reduced by 30% using a combination of rainwater harvesting and/or selective plantings with the final selections to be made at site plan approval.

Pedestrian Access

As shown in Figure 2-2, the project has been designed in a pedestrian friendly manner. There are sidewalks proposed throughout the development and along Red Schoolhouse Road. A pedestrian promenade through the center of the development, provides a pleasant and scenic pedestrian environment to encourage walking. This promenade provides a connection from the multi- family development in the eastern portion of the site, through the Townhouse development, connecting with the senior housing development in the northern portion of the site.

Mass Transit Access

The applicant will seek to coordinate a bus stop location along Red Schoolhouse Road near the main access. Accommodation could also be made in the vicinity of Loescher Lane. The availability of mass transit would enable residents to reduce dependence on private vehicle trips These efforts will be coordinated during the site plan approval process.

Employment Practices

The applicant will employ construction workers and purchase construction materials from local sources. In addition to stimulating the local economy, this practice will save in fuel by reducing the distance workers and materials have to travel to the project site.

1.8.12 Adverse Environmental Impacts that Cannot be Avoided

The development of the proposed project will result in some adverse environmental impacts which cannot be avoided. Although these impacts cannot be avoided, they can be mitigated as noted in each of the preceding chapters. Some of these impacts will be temporary or short-term impacts associated with the construction phase of the project, while others will be long term impacts associated with occupancy of the residences.

Short Term Impacts

- presence of construction and delivery vehicles on the site and on surrounding roads
- localized increase in noise due to operation of construction vehicles and equipment
- localized decrease in air quality (especially dust) due to construction operations
- increased potential for on-site soil erosion and downstream sedimentation impacts

Long Term Impacts

- permanent alterations to existing topography to grade areas for the proposed road, roundabouts, and building foundations
- loss of woodland vegetation and associated wildlife habitat
- need to maintain stormwater quantity and quality management facilities
- Increase in resident population and concomitant increase in demand for community services
- Increase in local area traffic

1.8.13 Alternatives

The **PUD Mixed Use Plan**, as discussed throughout the DEIS, comprises a mixed-use development plan including 266 residential units plus 45,500 square foot of commercial development for the creation of an integrated community in a serene park-like setting. This is the applicant's preferred development project.

Section 617.9(b)(5) of the regulations implementing SEQRA requires that a draft environmental impact statement include a description and evaluation of the range of reasonable alternatives to the proposed action which are feasible, considering the objectives and capabilities of the project sponsor. The range of alternatives must include the "No Action" alternative.

In addition to the No Action alternative, the Scoping Document for this DEIS requires an evaluation of two identified alternatives based on the existing zoning.

Since the proposed project contemplates a change to the zoning of the parcel, the two alternatives studied are based on the existing zoning.

In comparison, the **Existing Zoning As-of-Right** development offers 396,625 square foot of warehousing and flex space storage in four buildings. Two buildings are located along Red Schoolhouse Road and two additional buildings are located in the interior of the site. This development alternative also includes a 9-lot subdivision for the development of nine new single-family detached dwelling lots.

A second alternative labeled **Flex Space Warehouse Layout Alternative** is show in Figure 3.5-2. This layout also includes four buildings but has a moderately reduced footprint, (218,300 square feet), and a different building configuration, compared to the As of Right Alternative.

For comparison purposes the three alternatives: No Action Alternative, Existing Zoning As-of-Right and Flex Space Warehouse Layout are described and evaluated below. A summary matrix of the varying quantitative impacts associated with each alternative plus the proposed PUD Development are provided as Table 5-1 at the end of this section.

Impact Comparisons

Table 1-4 below provides a comparison of impacts between the PUD Development Plan, the Existing Zoning Plan and the No Action Plan. The quantitative impacts associated with the proposed development plan and the various alternative layouts are summarized below;

Table 1-4
Alternative Impact Comparison

Area of Concern	*No Action*	*As-of-Right Alternative*	*Flex Space Warehouse Alternative*	*PUD Development Plan*
Land Use				
Impervious Surfaces (acres)	3.5	12.5	12.0	13.8
Total Project Cut (cubic yards)	0	84,000	82,000	80,700
Total Project Fill (cubic yards)	0	122,000	118,000	115,700
Net Cut to be imported (cubic yards)	0	38,000	36,000	35,000
Residential Units				
Residential Units	3	9	9	266
Commercial Square Foot	0	396,625	218,300	45,500
Natural Resources				
Total Site Area (acres)	39.6	39.6	39.6	39.6
Total Area of Disturbance (acres)	0	36.5	35.0	31.6
Woodland / Meadow Disturbance (acres)	0	25.5	24.0	21.6
Total Wetland Area (acres)	1.36	1.36	1.36	1.36
Wetland Disturbance (acres)	0	0	0	0
Slope Disturbance (>25%) (acres)	0	2.8	2.6	1.9
Community Resources				
Population	12	33	33	651
School-age Children	3	9	9	95
Trips (peak hour)	4	123	83	307
Tax Revenue Village of Chestnut Ridge	$8,214	$66,040	$39,750	$116,129
Tax Revenue Town of Ramapo	$44,878	$533,333	$321,014	$966,516
Tax Revenue East Ramapo CSD	$84,938	$747,291	$449,795	$1,200,872
Water Demand / Sewage Flow (based on 110 gallons per bedroom per day)	1,320	3,510	1,932	66,880

Source: Tim Miller Associates, 2021

1.8.13 Irreversible and Irretrievable Commitment of Resources

The proposed project would commit approximately 39.6 acres of land to mixed-use development for the construction of 62 duplex dwellings, 118 units of senior housing and 84 rental apartments. Once committed to mixed-use, the site would be unavailable for other uses for the foreseeable future.

The mixed-use density of up to 7 residential units per gross acre in the PUD allows for construction of the mixed-use project in a serene parklike setting. This density also provides housing options for residents who wish to live in other than single family

The finite resources that would be irretrievably committed by the proposed action would be materials and energy required to construct and maintain the subdivision upon completion. Construction would involve the commitment of resources associated with the use of concrete, asphalt, steel, lumber, paint products, and other building materials.

The operation of construction equipment would result in consumption of fossil fuels and other finite energy sources. When completed, the new residences and businesses would require electricity and the use of fossil fuels either directly as heating fuel or indirectly as electricity

1.8.14 Growth Inducing Impacts

As indicated in previous sections of the document, the proposed project will add a projected 651 persons to the population of the Village of Chestnut Ridge and the Town of Ramapo.

The project site is to be served by public water and sewer systems. The project will not create any new districts or introduce any new infrastructure that could induce future growth.

The project will promote increased construction employment and, on a cumulative basis, an increase in long term demand for goods and services that will have a steady multiplier effect in the project area.

The market value of the proposed project would total approximately $102 million. Construction of the project would require a commitment of person hours of labor, which can be viewed as beneficial to the community, the local economy, and the construction industry with respect to the generation of jobs. Based on labor hour estimates published by the Urban Land Institute and accounting for secondary employment resulting from the construction, this project would generate more than 300 jobs in the various construction trades associated with this project.

It is anticipated that a number of construction workers would come from Rockland County and nearby New York counties in the lower Hudson River valley as well as northern New Jersey. These workers are expected to have a positive impact on existing local businesses that provide such services as food convenience shopping, gasoline, etc.

Future residents would utilize area retail, personal service, and other commercial services. It is estimated that approximately 30 percent[3] of a typical household's income is spent on retail goods and services. Based upon an average household income of $200,000 annually would be required to support a townhouse residence valued at more than $550,000. Thus, it is estimated that 62 new households would spend upwards of approximately $3,000,000 annually. The senior housing and apartment rental flats provide a more affordable housing choice for households with an average income of $85,000 and up. The 118 senior apartments plus the 84 apartments would spend upwards of an additional $5,000,000 for a total expenditure of an estimated $8,000,000 annually. A portion of these expenditures would be made at area restaurants, supermarkets, local convenience stores, apparel stores, and service businesses such as gas stations and personal service salons.

[3]According to figures from the US Bureau of Economic Analysis published in the ULI Development Assessment Handbook, up to 40 percent of Total Personal Consumption Expenditures is composed of Shopping goods and Convenience goods. To provide a conservative analysis an estimate of 30 percent has been used for this DEIS.