



July 18, 2014

John W. Petronella  
Deputy Regional Permit Administrator  
New York State Department of Environmental Conservation  
Division of Environmental Permits – Region 3  
21 South Putt Corners Road  
New Paltz, NY 12561-1620

Re: Silo Ridge Resort Community

Dear John,

As previously discussed, VHB Engineering, Surveying and Landscape Architecture, P.C. is performing civil/site engineering services on the Silo Ridge Resort Community Project on behalf of Silo Ridge Ventures, LLC.

Land uses within a ½-mile radius of the Site include: agricultural; commercial; community and public services; industrial; residential; recreation and entertainment; wild, forested, conservation lands and public parks; and vacant land. The predominant land use within a ½-mile radius is “wild, forested, conservation lands and public parks.” It should be noted that much of the land within the Site that is identified as “vacant land” is forested, particularly in the western portion of the Site.

The 670±-acre Site is largely vacant and undeveloped, except for a 2.2-acre residential parcel and the existing golf course and its associated amenities, which include a clubhouse and banquet facilities. The recreational facilities, including the golf course, encompass approximately 135 acres of the 670±-acre parcel. In addition to the golf course, open space on the Site also includes the approximate 230-acre hillside and ridge in the western portion of the Site. The Site has varying topography, with slopes ranging from almost 100% to nearly flat. Approximately 58% of the Site has slopes greater than or equal to 15%. A small area in the northeast portion of the Site along Route 22, south of Route 44, is adjacent to Amenia/Cascade Brook. Approximately 11.6± acres of this area of the site are within the 100-year flood plain. All other areas of the Site appear to be outside of the 100-year flood plain.

According to the Wetland Delineation Report prepared for the project, there are eight streams on the Site, two of which are perennial (flow year-round) and six of which are intermittent (dry some of the time). One of the perennial streams is Amenia/Cascade Brook, which enters the Site south of Route 44, traverses along the eastern property boundary, and exits the Site near the existing golf course entrance on Route 22. The other perennial stream is unnamed. The stream flows southeasterly and drains into Amenia/Cascade Brook off of the Site. The remaining streams are denoted on the wetland delineation map. There are 12 wetlands located throughout the Site, totaling approximately 36 acres. A NYSDEC regulated wetland is located on the southeast region of the Site, the remaining onsite wetlands are regulated by the Army Corp of Engineers.

The Site currently obtains water from a combination of sources. The existing clubhouse was served by a water supply system consisting of an on-site groundwater supply well, water treatment equipment,

and finished water storage. The existing golf course irrigation system was a separate and independent system used to irrigate the tees, greens, and fairways. In total, approximately 135± acres were irrigated. Irrigation water was drawn from a natural pond on the Site and distributed via a network of underground piping to irrigation sprinklers. The irrigation pond is fed by a natural spring source, a small on-site stream, and by stormwater runoff from the Site.

The existing sanitary wastewater system for the former clubhouse consists of an on-site septic system with subsurface disposal via leach field. The system operated under New York State Pollution Discharge Elimination System (SPDES) permit number NY0234966, with a permitted flow rate of 0.0126 million gallons per day (MGD) or 12,600 gallons per day (gpd) and a permit expiration date of 2025. This septic system will not be used as part of the proposed Silo Ridge Community Development.

The Site is currently accessible via a main entrance on NYS Route 22. This entrance provides access to the former Silo Ridge Country Club building. The residential parcel north of Route 44 is accessed by a driveway on the westbound side of Route 44. The eastern boundary of the Site is Route 22, which is a major north-south transportation route through eastern Dutchess County. U.S. Route 44 bisects the Site in the northern portion of the property.

The “Modified Project” program includes 21 lodging (hotel-condominium) units and a total of 224 residences, including single-family homes and condominiums.

#### Water System:

The projected average day water demand is approximately 128,000± gallons per day (gpd) or 89 gallons per minute (gpm). The anticipated maximum daily flow is approximately 255,000± gpd (177 gpm).

To meet the water demand of this project, groundwater sources must be capable of providing 177 gpm with the largest producing well out of service, and the proposed water treatment facilities must be capable of treating this volume. The distribution systems of the water treatment facilities will be designed to meet the anticipated maximum daily water demand.

LBG recently conducted a 72-hour pumping test event on several wells located on the Silo Ridge property. The 72-hour pumping test was completed in accordance the New York State Department of Environmental Conservation’s “Pumping Test Procedures for Water Withdrawal Application”, March 2013. The test included the pumping of existing Wells 1, 2, 9 and 11 which had been previously tested by Chazen, and newly drilled Wells 25 and 31. Based on testing, the groundwater resources are sufficient to meet the anticipated maximum daily demand for the project.

The proposed project includes an onsite community water supply system consisting of new groundwater wells, well house water treatment facilities, a water storage tank and a distribution system. The water distribution system will consist of eight-inch water mains with approximately 185 individual service connections. Fire hydrants will be located along roadways. The water storage tank will be located directly south of the Winery Restaurant. To minimize withdrawal impacts generated by both potable and irrigation water use during dry periods, an alternate discharge point is proposed at the top of the stream by hole 18 green which ultimately leads to the large pond to supplement irrigation.

A Water-Works Corporation will be formed in accordance with the New York State Transportation Corporations Law, which will be responsible for the operation and maintenance of the public water supply system servicing Silo Ridge.

#### Sanitary Sewer System Design:

An onsite wastewater collection and treatment system capable of treating the projected demands is proposed. The system will consist of a gravity collection and conveyance system supplemented by



pump stations, low pressure sewers, and the wastewater treatment plant (“WWTP”). The site plan for the WWTP is included in the Revised Plans. The WWTP will be constructed during the first phase of the project. The WWTP will be located on the north side of Route 44.

Gravity sewers have been selected in areas of the Site where practical. Low pressure sewers have been selected in areas where widely varying topography makes gravity sewers impractical. All low pressure sections of the system will ultimately empty into a gravity section or into a pump station. Each served building or house in the low pressure sewer areas of the collection network will be equipped with a grinder pump station that will convey wastewater to a low pressure collection trunk. There will be two pump stations that discharge to the same force main, which itself discharges to that portion of the gravity system flowing directly to the WWTP.

The WWTP will consist of advanced biological treatment, gravity settling of solids, advanced filtration to remove residual solids, and disinfection prior to a surface water discharge. The wastewater will be treated to intermittent stream standards, the highest level of treatment available, without treating to drinking water standards. In accordance with NYSDEC requirements, the WWTP will have multiple outfalls as part of the SPDES application. These outfalls will likely consist of an outfall to the Irrigation Pond with a subsequent outfall for the land application of treated wastewater effluent, as well as an outfall to the Amenia Cascade Brook. Determination for the specific outfall discharge location will be based upon season and irrigation demand and will be further evaluated during the Site Plan and SPDES review process.

Tanks will be placed outdoors, with low-profile engineered covers for odor control, except that any tank within 500 feet of other structures will be placed inside the building housing the tertiary treatment processes. A building next to the tanks would contain the tertiary treatment processes (filtration and UV disinfection) and support facilities (office, chemical room, blower room, solids dewatering room, storage, etc.).

The wastewater treatment technology will meet all effluent quality requirements as required by NYSDEC. When met, these stringent standards will help preserve the water quality of the downstream Class C irrigation ponds, Amenia/Cascade Brook (Class Ct), and downstream water bodies. The WWTP is anticipated to be steel-frame, with roof and siding materials blending with the surrounding buildings and landscape. The low pressure sewer pump stations will be entirely subsurface, with only an at-grade access hatch for each. The community pump stations will be either entirely below-grade with an access hatch, or will consist of a small above-grade structure containing pumps and controls. Each of the community pump stations also will be equipped with an enclosed emergency generator with appropriate muffling, and will have sufficient landscaping, fencing, or architectural features to allow them to have a negligible visual impact. Pavement will be kept to a minimum, with enough paved area only to provide truck access and maneuvering for deliveries and solids hauling, and a small number of parking spaces for WWTP operators.

Odor issues will be mitigated by proper operation of aerated processes and by enclosing the treatment process inside a building or under covered tanks. The main treatment process tanks will be aerated and mixed to maintain oxygen levels and prevent septic conditions that lead to the generation of most offensive odors. Odor control technology options, if needed, include activated carbon or a scrubber. All other portions of the WWTP process are expected to yield negligible odors and will be subjected simply to standard ventilation and climate control in the building.

Any future equipment used for odor control would be located within the building. All ventilation will conform to the Ten States Standards, NFPA, and any other applicable standards. A Sewage-Works Corporation will be formed in accordance with the New York State Transportation Corporations Law, which will be responsible for the operation and maintenance of the public sewer disposal system servicing Silo Ridge.



Construction of the Modified Project is expected to occur over three phases, taking approximately seven years. The construction phasing that is currently anticipated is illustrated conceptually on MDP Plan Sheet SP-5 "Overall Phasing Plan". It is noted that the sequencing of each of the residential components will depend on market demand.

PHASE I: Year 1 to Year 3

- Sales Office and General Store
- Clear, grub and rough grade
- Golf Course, Golf Academy, Comfort Stations and Maintenance Facilities
- Water and Wastewater Treatment Plants
- Infrastructure
- Clubhouse/Lodge – approximately 4,850 SF, including the Pro Shop, bathrooms, small wine cellar, bar/lounge and small lobby area.
- Village Green neighborhood, Golf Villas neighborhood, 10 South Lawn neighborhood homes and 31 Estate Homes
- Artisan's Park Overlook

PHASE II: Year 4 to Year 5

- Clear, grub and rough grade
- Infrastructure
- Clubhouse/Lodge expansion
- 26 Estate neighborhood homes and 22 South Lawn neighborhood homes

PHASE III: Year 5 to Year 7

- Clear, grub and rough grade
- Infrastructure
- Winery Restaurant
- Vineyard Cottages

Attached please find one (1) copy of each of the following for your reference:

- NYSDEC – Division of Environmental Permits – Region 3 – Pre-Application Meeting Form
- Silo Ridge Site Location Map
- Silo Ridge Project Plans (18" X 24"):
  - Plans from the submitted MASTER DEVELOPMENT PLAN (MDP) Set
    - EXISTING SITE CONDITIONS, SP-1
    - OVERALL SITE PLAN, SP-2
    - OVERALL PHASING PLAN, SP-5
    - GRADING PLANS, GP-1 to 2
    - OVERALL STORMWATER MANAGEMENT PRACTICE IDENTIFICATION PLAN, SW-1
  - Plans from the submitted Phase 1 Site Plan Set
    - EXISTING CONDITIONS PLANS, C2.00 to C2.09
    - SITE LAYOUT PLANS, C5.00 to C5.12
    - GRADING AND DRAINAGE PLANS, C7.00 to C7.11
    - WASTEWATER AND WATER PLANS, C9.01 to C9.05
    - WASTEWATER AND WATER PROFILES, C9.01 to C9.21
    - OVERALL STORMWATER MANAGEMENT PRACTICE IDENTIFICATION PLAN, SW-1
- Silo Ridge NYSDEC Pre-Application Meeting Agenda
- Silo Ridge WWTP Facility Package
- CD containing all material listed above



At your earliest convenience, VHB together with Silo Ridge, would like to request a pre-application meeting to coordinate the review process moving forward.

Please do not hesitate to contact me directly with any questions at 914.467.6614.

Sincerely,

VHB Engineering, Surveying and Landscape Architecture, P.C.

A handwritten signature in black ink that reads "Amanda DePasare". The signature is written in a cursive style with a large initial 'A'.

Senior Project Manager



**New York State Department of Environmental Conservation  
Division of Environmental Permits - Region 3  
Pre-Application Meeting Form**

Name of Applicant (Print Full Name)		Telephone Number (Daytime)	
Mailing Address			
Post Office		State	Zip Code
Taxpayer ID (if applicant is not an individual)			
<b>Applicant is a/an:</b> (check as many as apply) <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Lessee <input type="checkbox"/> Municipality / Governmental Agency			
If applicant is not the owner, identify owner here - otherwise, you may provide Agent/Contact Person Information.			
<b>Owner or Agent/Contact Person</b> <input type="checkbox"/> Owner <input type="checkbox"/> Agent/Contact Person		Telephone Number (Daytime)	
Mailing Address			
Post Office		State	Zip Code
<b>PROJECT / FACILITY LOCATION</b> (mark location on map*) <b>Location:</b> (including Street or Road) <b>County:</b> <b>Town/City/Village:</b>			
<b>Name of Stream, Waterbody or Wetlands on the property</b>			
<b>Project Description and Purpose:</b> (Category of Activity e.g. new construction/installation, maintenance or replacement; Type of Structure or Activity e.g., bulkhead, dredging, filling, dam, dock, brief narrative of proposal. Submit plan**			
<b>*Site Location Map Mandatory:</b> Provide a location map showing the precise location of the project. A portion of a USGS topographical map is preferred, however, a town or county highway map or other suitable map (such as from the Internet) will suffice providing that the specific site location can be determined. Tax maps are not acceptable.			
<b>**Project Plan:</b> If available, provide a preliminary project plan that shows the existing conditions as well as the proposed work. DEC regulated wetlands should be shown and the boundary validated by DEC wetlands biologist.			
<b>Agenda:</b> Provide draft meeting agenda of items to be discussed with the Department. Include the SEQR status if possible and local approvals needed. Explain objective of meeting and number of attendees.			



## **NYSDEC Pre-Application Meeting Agenda**

29011.00 Silo Ridge

### **Meeting Date**

TBD

### **Purpose**

- 1) Discuss Silo Ridge Resort Community MDP and Site Plan Phase 1

### **Anticipated Attendees**

Silo Ridge Ventures, LLC: Pedro Torres, Mike Dignacco, Juan Torres

VHB: Amanda DeCesare, PE

Cedarwood: Brian Suozzo

Baswood: Bill Faulds

#### A. Current Status

- a. Town of Amenia – Lead Agency
  - i. EAF circulated
- b. SEQR: Findings Statement 2009

#### B. Local Approvals

- a. Amended Special Use Permit
- b. Amended Master Development Plan
- c. Site Plan Approval for Site Plan Phase 1

#### C. NYSDEC Review and Approvals

- a. Stormwater State Pollution Discharge Elimination System (SPDES) Permit
- b. Freshwater Wetland Disturbance Permit
- c. Stream Disturbance Permit

- d. Water Supply Approval Permit
- e. Wastewater State Pollution Discharge Elimination (SPDES) Permit
- f. Section 401 Water Quality Certificate
- g. Other

