

Potential Environmental Impacts (DEIS Section 3.0)

Section 3.1 Soils and Geology

Comment 3.1-1-PHT: I just heard that there are a huge number of chemicals authorized to be used on the grounds of this place. I think those chemicals are very scary based on what I learned the last time we had a golf course development. And I haven't even begun studying those. [Sharon Kroeger, November 17, 2007 Public Hearing Transcript, page 61]

Response 3.1-1-PHT: The project currently exists as a golf course, and turfgrass pest control chemicals are currently being applied on the golf course in accordance with NYS Pesticide Regulations and/or best management practices for turfgrass maintenance.

The project will decrease the maintained area of the golf course on the project site. Currently the golf course is maintained as mowed turf throughout the entire golf course playing area, including areas between fairways, and between tees, fairways and greens along the same hole. In the future, as indicated in Appendix F, "Habitat Management Plan," Figure ENV-3, there will be areas of grasslands between each hole designed to preserve grassland functionality. Tall grasslands plantings will separate fairways of different holes, while short grasses will be planted to separate tee benches from fairways of the same hole. Transitional grasslands will be planted around margins of existing forest to expand canopy habitat. These grassland areas will be managed at a much lower intensity, with minimal chemical inputs.

In addition, the golf course currently maintains turf up to the edge of ponds, drainage ditches and some streams on the property, and up to the edge of NYSDEC Wetland AM-15 along its western boundary. As discussed and illustrated in Appendix F, "Habitat Management Plan," working with the Town's consultants, the project has been designed to incorporate stream-side buffers or terrestrial habitat enhancements along all flowing streams; proposes aquatic habitat enhancement plantings around ponds, and proposes to increase the vegetative buffer around NYSDEC Wetland AM-15. These modifications reduce the amount of maintained turfgrass on the golf course, and should also serve to improve water quality by decreasing nutrient and potential contaminant runoff, by decreasing thermal loading, and are also designed to improve habitat functioning in these areas.

With regard to golf courses and chemical usage, research indicates that under most conditions, the small amount of pesticides that are moved through the soil are found at levels below the health and safety standards established by the United States Environmental Protection Agency. The studies demonstrate that the turfgrass canopy, thatch and root systems, when properly managed, are effective filters or sponges. Most of the pesticides applied to the turfgrass stay in the leaves, thatch or top 10 centimeters of soil⁵. See also Response 3.2-16-32F.

The Applicant has commissioned the development of a Natural Resource Management Plan (NRMP) for the site by Audubon International. Audubon International's detailed NRMP (which includes the IPM Plan) for the proposed Silo Ridge Resort Community is included as Appendix 9.11 of the DEIS. This document will continue to be revised to incorporate, for example, comments of Dr. Marty Petrovic, changes to the use of deicing chemicals and sands on site, the Habitat Management Plan, the changes to site design during the site plan review process and will ultimately become the management plan for the site.

Audubon International encourages and promotes organic approaches to managing landscapes, including golf courses. Organic approaches to golf course management starts with implementing cultural programs that minimize the need for pesticide use. The proposed golf course will be managed in accordance with the NRMP, which will utilize organic approaches throughout the management program. The NRMP sets forth management practices for turfgrass pest control, including fertilizer and pesticide application. Implementation of the NRMP will ensure a careful and considered approach to turfgrass management.

Education of the golf course superintendent is an important element of this approach. Audubon International staff train the superintendent on the use of the management programs identified in the NRMP. Training updates for the staff and review of the golf course occur annually, as part of a yearly re-certification audit and review. As the recommendations of the NRMP and the IPM are implemented during the course of construction and operation of the golf course to the satisfaction of Audubon International, the Applicant will be granted Audubon International's Silver Signature Certification.

At this time, a 100% organic golf course is not practicable based on independent studies of organic management of golf courses. These studies have consistently demonstrated that a 100% organic management program

⁵ Kenna, Michael and Snow, James. US Golf Association. Environmental Research: Past and Future. USGA Turfgrass and Environmental Research Online 1(3):1-25. TGIF Record Number 79123. <http://turf.lib.msu.edu/tero/v01/n03.pdf>

greatly diminishes the playability of the golf course. See the United States Golf Association (USGA) article at http://www.usga.org/turf/green_section_record/2005/jan_feb/Inorganic.html. Even with the implementation of the NRMP, there will be times when inorganic chemical use will be needed, although the frequency, amounts, and types of applications can be greatly reduced through the use of a NRMP.

Comment 3.1-2-PHT: I have some concerns about the impact of disturbing a golf course that may have toxic chemical pesticide residues residing in the soil, given practices that were used during the time that the golf course was originally constructed. Disturbing those soils could impact aquatic environment in the area. I recently came across a wonderful study done by an organization called Community and Environmental Defense Services. The document looked at the construction of new golf courses and the reconstruction of golf courses that had been around for two and three decades. I forwarded the study it to members of the Town Board and the Planning Board and members of the CAC so that they could review it. They also give recommendations to mitigate some of those issues. Their website is www.CEDS.org. I would urge everybody in town to look at that study. Given the movement of pesticides through the water and through different kinds of soils, I think there needs to be consideration with regard to the impact of disturbing those soils and the construction that will take place here. So I urge all the members of the Planning Board to take into consideration this study and discuss those issues with the people from Millbrook Ventures. Also, if the turf grass is converted to residential lawns, the chemicals can be toxic to children and pets. [Cheryl Morse, March 5, 2008 Public Hearing Transcript, page 54]

Response 3.1-2-PHT: See Response 3.1-1-PHT. Audubon International is not aware of any issues of chemical release during grading or construction of a golf course. It is noted that pesticides generally have a low mobility and tend to readily adsorb to the organic carbon in the soil profile. Soil testing has been completed on the Golf Course. See Appendix L, "Soil Testing Results." See Response A.9.11-6-MP2 for a discussion of the results of the soil testing. Biomonitoring will also be conducted to establish baseline conditions, as outlined in Response 3.2-24-GP38a.

Additionally, general erosion control methods for construction will address any potential for migration of soils into surface water bodies. This will minimize the potential for release of any pesticides from the soil into any waterbodies.

Specifically, before site construction begins, a detailed erosion and sediment control (E&SC) plan designed in accordance with and approved by the NYSDEC will be prepared. This plan will identify specific E&SC measures that will be implemented to protect adjacent aquatic resources. Clearing and

soil exposure will only occur on portions of the project site where construction activity will be immediately occurring. In accordance with NYSDEC regulations, areas of soil disturbance that will remain idle for 14-days will receive temporary and/or permanently stabilization. In locations where a 5-acre soil disturbance waiver is requested from the NYSDEC, the NYSDEC may request that redundant erosion and sediment control measures be implemented. In addition, with any 5-acre waiver, any exposed soil which is idle for more than 7 days must receive permanent and/or temporary stabilization. The Applicant may also implement double silt fencing in areas of special concern, such as upslope of Cascade/Amenia Brook or NYSDEC AM-15. All of these measures will be detailed in the final SWPPP, which will be reviewed as part of the site plan application.

Comment 3.1-3-34D: Regarding DEIS Figure 3.1-1, Soils Map, [t]he map and accompanying tables provide information as to the suitability of the soils/slopes to support development. Most of the proposed development site north of Rte. 44 where the winery and town homes are proposed is severely constrained by the Applicant's own data. The Applicant should explain why they are contradicting their own data in placing the town home development in this area. The only area that appears suited for development lies in the curve where Stockbridge silt and loam is found on 8-15% slopes. However, development in this area is challenging from a visual perspective. [Dr. Michael W. Klemens, LLC, Letter dated March 18, 2008, Comment D, page 1]

Response 3.1-3-34D: The soils map provided in the DEIS, which is based on general information provided by the Dutchess County Soil Survey, is a useful tool in that it provides a general idea as to the likely soils within a given region. The soil types are then placed into a rating system to indicate to the reader certain properties, such as "severe constraints", that have been observed with this soil type, as is the case with the soil around the proposed winery location. However, basing site development feasibility solely on the soils map is not ideal; that is why a preliminary geotechnical investigation was conducted to determine more site-specific existing conditions. The preliminary geotechnical report, dated February 16, 2007 (Appendix 9.14.2 of the DEIS) included investigations in this area as well as in other areas of proposed development. Specifically near the winery and townhomes (Block V) on the northbound side of Rte. 44 two explorations were performed; SHB-29 in the area of the Townhomes and SHB-30 in the area of the Winery. Both explorations encountered Glacial Till material classified as sandy silt (ML) or silty sand (SM) and were advanced to a depth of 24 feet without encountering sound bedrock.

While the soils map provided in the DEIS identifies less than ideal subsurface conditions across the project site, that does not necessarily mean the project site is not suitable for development. As stated in the executive summary of the preliminary geotechnical report, the site is considered suitable for the proposed development provided the geotechnical recommendations are incorporated in the design. This includes the development of “steep” slopes greater than 30%. The site is somewhat uniform in its geotechnical composition with no areas tested where major constructability challenges were determined. All construction proposed can be accomplished through normal structural methods.

When the engineering drawings are advanced during the site plan phase, all necessary information will be taken into account to allow for minor adjustments to be made, if necessary, to proposed development locations and recommend the proper foundation and soil systems to ensure structural integrity.

With respect to general erosion and sediment control (E&SC) on steep slopes, E&SC measures will be implemented for steep slope conditions on a case by case basis. Based on the overall grading plan, the preliminary subsurface investigations and general engineering knowledge, the Applicant’s engineering team does not anticipate any unusual construction issues with respect to E&SC. General E&SC objectives on steep slopes are: 1) prevent as much storm water as possible from flowing down the slope into the construction site, 2) reduce the velocity of the water on the slope as much as possible, and 3) collect storm water and remove excess sediment before discharge from the construction site.

Where practical, steep slopes (over 3:1) will have devices at the top of the slope to limit stormwater flow over and into a construction site. Wherever possible, the ground at the top of the slope should be graded and protected so stormwater flows away from the construction site. Measures will be implemented, as required, down the slope face to slow storm water runoff. Silt fences will be used at the bottom of steep slopes and erosion control blankets are practical measures used for E&SC on steep slopes. Other methods of protecting the slope when rain is likely may be used such as plastic and spray-on soil binders. Where practical, diversion swales and sediment basins will be located at the base of the slope as designed in accordance with NYSDEC guidelines. A sock or bag filter can and may be used to remove sediment from the sediment basin effluent so the water is further filtered before discharge off site.

Comment 3.1-4-GP32: Table 3.1-2, which details soil disturbance per soil category, should be calculated and included in the section on the preferred alternative. [Greenplan, Inc., Letter, April 6, 2008, Comment #32, page 6]

Response 3.1-4-GP32: Table 3.1-3 in the DEIS only evaluated impacts from the new development on the site, not the golf course, because the golf course was not proposed to be redeveloped under the alternative evaluated in Section 3.0 of the DEIS. Soil disturbance per soil category has been prepared for the preferred MDP Alternative and is summarized in the table below. These areas of impact were identified based on the grading limits for the new development and the grading limits for the golf course. The non-golf development will impact approximately 130.7 acres, and the redevelopment of the golf course will impact 112.5 acres. In total, 243 acres will be impacted by both the non-golf and golf development. The table below reviews impacts to Farmland Soils and also to soils as they relate to hydric⁶ classification.

Table 3.1-1, "Impacts to Soils from Master Development Plan"

	Non-Golf Development (Acreage)	Golf Development (Acreage)	Cumulative (Acreage)
FARMLAND SOILS			
Prime Farmland	3.2	7.5	10.7
Farmland of Statewide Importance	40.9	55.3	96.2
Not Prime Farmland	86.7	49.7	136.4
TOTAL	130.8	112.5	243.3
HYDRIC CLASS			
Hydric	0.5	0	0.5
Non-Hydric (upland)	129.9	106	235.9
Potential for Hydric Inclusions	0.3	5.7	6.0
Water	0.0014	0.7	0.8
TOTAL	130.7	112.4	243.2

Comment 3.1-5-GP33: For the preferred alternative, slightly less than ½ of all the land (108 acres out of 248 acres) to be disturbed falls into a "steep slope" category (15%+). The applicant needs to explain how this is consistent or inconsistent with the purposes of the RDO in terms of environmental resources. While the applicant has correctly identified potential impacts such as mudslides, houses sliding downhill, rockfalls damaging homes and erosion concerns, they have not clearly detailed mitigation to address these potential impacts. There should be a full description of potential engineering solutions which minimize the potential impacts. It is not enough to say "employing best design, engineering and construction practices will deal with potential hazards..." Mitigation needs to be clearly

⁶ The Hydric Soil Definition (Federal Register, July 13, 1994) is: "A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part." Soils with the potential for hydric inclusions are those soils that may have hydric soils within the mapping unit.

articulated so the Lead Agency may evaluate if the mitigation is sufficient to minimize the impacts. [Greenplan, Inc., Letter, April 6, 2008, Comment #33, page 6]

Response 3.1-5-GP33: The April 2008 MDP has reduced the extent of “steep slope” category (15%+) to 105 acres out of a total 246 acres disturbed. Of the 105 acres, 68 acres disturbance results from structural development and the remaining 37 acres from golf course re-development on prior disturbed land. Appendix M, “April 2008 Master Development Plan,” contains Sheet ENV-1, which illustrates the existing conditions with slopes greater than 30%. This map indicates that there are approximately 183 acres with slopes greater than 30%. Figure 3.1-1, “Slope Disturbance by Slope Category and Location,” illustrates the amount of disturbance that will occur on each category of slope (0-15%, 15-30%, and greater than 30%) and further breaks down the information by area of the site. This figure indicates that there will be approximately 20 acres of disturbance to slopes greater than 30%.

As stated in the Zoning Law, “The purpose of the RDO is to provide use and design flexibility to encourage resort development on appropriate large properties.” The Zoning Law also states, “In exchange for granting permission for use flexibility and more intensive development than is allowed by the underlying zoning, the Town seeks to achieve significant protection of open space resources, especially scenic viewsheds, ridgelines, water resources and ecosystems.” The April 2008 MDP provides 80% of the site in open space protection by conservation easement, which lies within a scenic viewshed, does not propose development that breaks a ridgeline, and protects a major ridgeline that occurs on the property by conservation easement and provides a Habitat Management Plan (see Appendix F) to protect water/wetland resources and ecosystems.

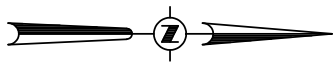
In these areas where development is proposed on slopes, erosion control and drainage measures will be placed as proscribed by NYSDEC and outlined in the Master SWPPP. See also Response 3.1-3-34D. The measures will include the following:

- Cutting of existing vegetation will be minimized by field surveying each building site including trees 8” caliper and larger prior to site plan submission and custom designing each building for the site;
- Roadways have been aligned along contours lines to reduce grading impacts and steep road/drive grades; and

The Applicant will establish an escrow account to provide funds for the Town to retain engineering review of all site plans and no certificates of occupancy will be granted until all erosion control and drainage measures required have been completed to the Town’s satisfaction.

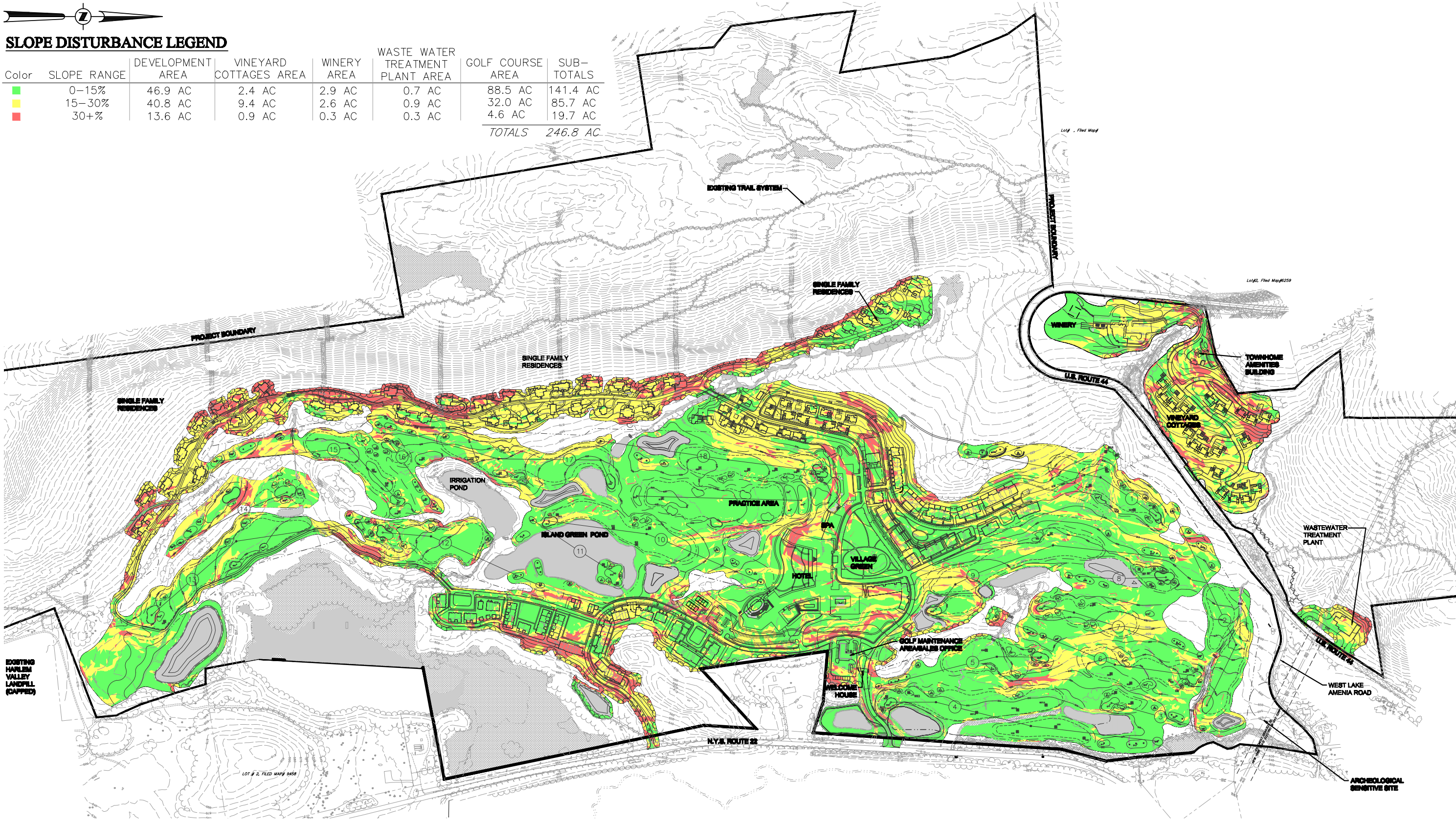
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SLOPE DISTURBANCE LEGEND

Color	SLOPE RANGE	DEVELOPMENT AREA	VINEYARD COTTAGES AREA	WINERY AREA	WASTE WATER TREATMENT PLANT AREA	GOLF COURSE AREA	SUB-TOTALS
■	0-15%	46.9 AC	2.4 AC	2.9 AC	0.7 AC	88.5 AC	141.4 AC
■	15-30%	40.8 AC	9.4 AC	2.6 AC	0.9 AC	32.0 AC	85.7 AC
■	30+%	13.6 AC	0.9 AC	0.3 AC	0.3 AC	4.6 AC	19.7 AC
TOTALS							246.8 AC



Silo Ridge Resort Community
Master Development Plan
SLOPE DISTURBANCE
BY SLOPE CATEGORY & LOCATION
Town of Amenia, Dutchess County, New York

Figure
3.1-1

To reduce visual impacts, in the April 2008 MDP, the Applicant adjusted the single-family and townhome unit designs that are adjacent or on steep slopes so that the lower level normally associated as basement would be utilized as living space. See page 26 of the “Architectural and Landscape Character” booklet in Appendix M for building sections. Stairs or an elevator will be used to gain access to the uphill side of the dwelling units. This greatly reduces disturbance required to site a home because the structure is designed to fit into the grade. It is the Applicant’s opinion that many of the slopes help shield the buildings from the hairpin turn viewshed because of how they are situated on the site. Terracing and stepping with low walls will be used to adjust disturbed areas back to existing grade lines.

Section 3.1.3 of the DEIS, *Construction-Period Erosion and Sediment Control Measures*, discusses the following engineering solutions which will be utilized in addition to the intensive survey, additional detailed geotechnical survey, and custom design practices for buildings and structures discussed above: Stabilized Construction Entrances, Dust Control, Temporary Soil Stockpile, Temporary Seeding, Stone Inlet Protection Barrier, Erosion Control Blanket, Stone Check Dams and Temporary Sediment Basin. Additionally, under *Post-Construction and Permanent Erosion Control Devices*, Establishment of Permanent Vegetation and Rock Outlet Protection are discussed.

To reduce impacts to 30% slopes or greater the Applicant prepared a Mitigation Plan which moves Single Family Homes located along the base of the areas where slopes are less than 30% further to the south. Please see Figure 3.1-2, “Response Plan – 30% Slopes Alternative”. Twelve homes that had portions of their footprint located within 30% slopes were re-located further south in areas where slopes are less than 30%. This plan achieves the same program density as the Preferred Action and reduces the impacts to slopes greater than 30%. Tree clearing would also be reduced by approximately 0.9 acres. However, impervious surface coverage increases with this Mitigation Plan as the development is spread over greater areas of the site. Due to a re-alignment of the drive servicing the single family homes in Block L a second stream crossing is required but impacts to the area along Stream J are also reduced by 800 linear feet. Please also see Response 2.2-2-PHT.

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DRAWING LEGEND

AREAS OF SLOPES $\geq 30\%$



THE
Chazen
COMPANIES

Silo Ridge Resort Community
Master Development Plan
RESPONSE PLAN
30% SLOPES ALTERNATIVE
Town of Amenia, Dutchess County, New York

SCALE: 1"=200'

Figure
3.1-2

JOB NUMBER: 10454.02

Comment 3.1-6-33J: The DEIS does not address who will supervise the construction site for compliance with erosion control measures. An independent agency should make sure that erosion control measures are enforced during construction as a massive amount of earth and rock are to be disturbed during construction. The volume approaches the yearly excavation efforts of a large gravel mine. [David Reagon Letter, March 20, 2008, Comment J, pages 7-8]

Response 3.1-6-33J: A NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit GP-0-08-001 (for storm water run-off from construction activities) will be required for this project. During construction, this permit requires the “Owner” to have a qualified inspector conduct inspections of the project site at regular intervals as identified with the subject permit. These inspections ensure that all erosion and sediment control practices identified within the SWPPP are maintained in effective operating condition at all times. Specific protocol for the documentation of information relative to these site inspections is defined by the subject permit. Additionally, the Applicant will establish an escrow account to provide funds for the Town to retain engineering review of all site plans and no certificates of occupancy will be granted until all erosion control and drainage measures required have been completed to the Town's satisfaction.

Comment 3.1-7-33T: The DEIS estimates that nearly one million cubic yards of material will be moved around on site during construction. Steep slopes will be disturbed, altered, and even increased. The applicant should state clearly how erosion control will be implemented during construction and, just as importantly, who will monitor the implementation. If the project changes owners, or fails how will the site be reclaimed? The DEIS needs to answer these questions. One million cubic yards of earth and rock amount to 50,000 large dump truck loads, which is no small earth moving project. [David Reagon, March 20, 2008, Comment T, page 16]

Response 3.1-7-33T: The construction of the project is being phased over 5-6 years. The Executive Summary of this FEIS provides a discussion of the phasing program; however, the exact order and timeframe for each of the residential components will depend on market demand. The phased development of the project minimizes impacts by ensuring that only smaller portions of the site are being worked on at any one time, and that those areas are stabilized prior to initiation of construction on new areas. A detailed phasing plan and phasing schedule will be developed and incorporated into the final SWPPP prepared for this project and will be included in the MDP. See Response 3.1-2-PHT for additional information on the timeframes for

⁷ Defined in the SPDES permit regulations as a “person or legal entity that owns or leases the property on which the construction activity is occurring; and/or an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications.”

stabilization under the NYSDEC regulations. See Response 3.1-6-33J for a discussion of construction monitoring. See Responses 3.1-3-34D and 3.1-5-GP33 with respect to steep slopes and erosion and sediment control. See Response 3.7-14-20A, which discusses how the construction plan will be reviewed to increase efficiencies in construction and to balance cut and fills.

Comment 3.1-8-33U: The DEIS should also discuss what will be done to mitigate the visual impact of this construction, particularly the steep slopes that will be impacted. [David Reagon Letter, March 20, 2008, Comment U, page 16]

Response 3.1-8-33U: The visual impacts from construction are temporary and will be restoring following the construction practices. With regard to the permanent construction on steep slopes, see Response 3.1-5-GP33, which discusses the design of the single-family and townhouse units on the steep slope and Response 3.1-10-33W, which discusses the visual impact of the construction of these townhouses on slopes.

Comment 3.1-9-33V: Careful inspection of the Grading Plan shows that much of the steep slope impact will be along the western edge of the site where the valley bottom meets the steep slopes of the forested land. The map shown below was excerpted from the Grading Plan and it shows a typical home site in that area. The contours of the land are sharply altered so that the houses can be placed on a flat building envelope. Directly to the west of the building site, the map shows that a new steep slope has been created. If the map can be taken at face value, it shows that a new slope with a gradient greater than 100% will be created. This is a great increase over the 15-30% grade that the original contours show exist in the area. [David Reagon, Letter, March 20, 2008, Comment V, page 17]

Response 3.1-9-33V: During the preparation of the MDP, the area discussed was re-examined and field surveyed. The road alignment has been adjusted slightly to better meet existing conditions and home sites have been selected in areas more suitable for development. Homes have been designed to step up or down with grade specifically for this area and thus flat building envelopes are not required. A preliminary geotechnical evaluation has been completed in this area. It is the Applicant's opinion after reviewing existing conditions and grades in the field, that the proposed grading in the MDP can be accomplished as shown. A more detailed geotechnical evaluation will be performed in support of final site design. Retaining walls and terracing of homes will be used to support these slopes. Visual simulations for viewpoints 5B, 5D, and 7D have been prepared using grading plans that illustrate these conditions. See Appendix G, "Visual Assessment and Simulations." Also see Response 3.1-5-GP33.

Comment 3.1-10-33W: The DEIS should discuss in detail how these steep slopes will be stabilized. There should be a detailed geotechnical discussion of the rock and soil types and how well they will maintain this new slope. There should also be a detailed discussion of how the soil and rock above these newly created slopes will be stabilized along with a discussion of how runoff from these steep slopes will be controlled. There should be a discussion of the visual impact of these steep slopes that will possibly expose rock faces. There should be a discussion of what kind of vegetation is proposed to increase the stability of these slopes. [David Reagon Letter, March 20, 2008, Comment W, page 18]

Response 3.1-10-33W: Please see Response 3.1-9-33V regarding construction on steep slopes and the preliminary geotechnical evaluation in Appendix 9.14 of the DEIS. See Response 3.2-4-33Y regarding the treatment of stormwater in this area. See Response 3.1-5-GP33 regarding visibility of constructing on steep slopes. A detailed geotechnical evaluation will be conducted during the site plan review phase to determine the stability and parameters for any rock removal. In the area of the homes on the west side of the project site, the preliminary geotechnical evaluation did not find rock. Where slopes are cut to 3:1 or greater, erosion sediment control blankets will be used to stabilize the slope and the areas will be further seeded and planted with vegetation to match the existing conditions. In the event that rock is exposed it would not be replanted. The only spots where rock might be exposed would be in the wooded area along the western portion of the site. In this location, the houses and existing vegetation to remain, along with proposed landscaping, would reduce this visual impact, in the Applicant's opinion.

Comment 3.1-11-33X: Silo Ridge proposes to build a lot of expensive real estate on steep slopes and they need to discuss how they are going to do it. It is an integral part of their plan and the issue needs to be more completely discussed in the DEIS. The steep western slope of the project is slated to have housing and roadways cut into it. These slopes have become more stable over a several thousand year period. When the toes of the slopes (the bottom edges) are cut away for housing plots and roads, they will be steeper and may become unstable. Soil and rock may begin to move down the newly steepened slopes onto the roads and houses below. This will be aided by frost action and the movement of both surface and groundwater as gravity re-stabilizes the newly created steep slopes. The orientation of natural joints and cracks in the bedrock will be an important factor in this stabilizing process. [David Reagon Letter, March 20, 2008, Comment X, page 18]

Response 3.1-11-33X: Comment noted. The detailed geotechnical evaluation and the design of structural measures for roadways, houses and retaining walls will be conducted and prepared in accordance with appropriate engineering practices. Please also see Response 3.1-5-GP33 for a discussion of

engineering practices and mitigation measures that will be implemented for construction on steep slopes.