

### Section 3.4 Wildlife

**Comment 3.4-1-PHT:** As an environmentalist, I think the project might damage habitats and migratory ranges on the hill. I've stopped many times up on that hill to watch Peregrine falcons, red tailed hawks, and flocks of wild turkey. [Elizabeth Whaley, November 17, 2007 Public Hearing Transcript, page 134]

**Response 3.4-1-PHT:** The development plan for the site will preserve over 536.7 acres of open space that will provide essential habitat for resident bird populations at the site. These habitats include 320.2 acres of natural woodland and wetland and 42.9 acres of fields, meadows and revegetated land. Additionally, 173.6 acres of managed Golf Course landscape will be preserved (See Appendix F, Habitat Management Plan). Wild turkey and red tailed hawks are addressed in the Habitat Management Plan. Peregrine falcons do not currently nest on the site. The value of the site as a migration stop-over for peregrine falcons will not be diminished by development in the down-slope areas.

**Comment 3.4-2-PHT:** One commenter discussed a document titled *Protecting the Aquatic Environment from the Effects of Golf Courses*. Her comments about the document are that "it is a really good study, state-of-the-art. The authors are from Maryland, and Maryland has really been doing some incredible ground-breaking construction with regard to stormwater runoff and construction. I would urge everyone to look at this. I was going to go into some more detail about what's enclosed in the study and so forth and so on, the effect on fish, issues with erosion, channeling, the toxic residue over load going in and leaching into the waterways, but I think anyone who could read this, and it is written in lay terms, that most people would really understand. It also offers a lot of scientific information but in clearly written plain language. You don't have to have an engineering degree to understand it. It's written for citizens who are looking into these kind of land issues. So while I'm not completely opposed to the project, I do have concerns about the environment and how that kind of construction and revamping the golf course will affect the nature of things here." [Cheryl Morse, March 5, 2008 Public Hearing Transcript, page 56]

**Response 3.4-2-PHT:** Comment noted. Many of the concepts addressed in the referenced document have been incorporated into this Habitat Management Plan (Appendix F).

**Comment 3.4-3-PHT/38J:** If the town is included in the wastewater system, what will be the impact of that on the downstream wetlands and aquatic species, especially in summer, when the stream is a trickle? There will be more water coming from the sewer treatment plant so that there is regular flow in the stream.

Is the impact on wetlands further down the valley being studied? How is that going to be mitigated? Is that the best way to go? Should we not require a wetland type sewer treatment plant for this development as opposed to a traditional one? [Patrick J. Nelligan, November 17, 2007 Public Hearing Transcript, pgs. 43-44]

**Response 3.4-3-PHT/38J:** With respect to the impact of the WWTP on downstream wetlands and aquatic species, please refer to Response 3.2-2-PHT. Also see Response 3.2-2-PHT with respect to “..more water coming from the sewer treatment plant...” and the “...impact on wetlands further down the valley...” Response 3.2-2-PHT clarifies how the WWTP will not adversely affect the current hydrogeology, and quality of aquatic resources on the site.

With respect to “...should we require a wetland type sewer treatment plant...”, although this type of WWTP does provide a certain ecological benefits, such as wetland and habitat creation, failure of these types of systems could result in a more catastrophic ecological impact than the failure of a conventional WWTP systems. The failure of a constructed wetland WWTP system could potentially increase contamination to receiving water bodies resulting in severe aquatic pollution and an increased chance of the spread of various water born diseases.

Furthermore, even the best constructed wetland WWTP will have limitations. One of the most important factors in the success of a constructed wetland WWTP system is the continuous supply of water. In addition to the wastewater that is to be treated, supplemental water must be added if the wastewater supply is not sufficient to sustain plant populations during dry periods. The construction of a constructed wetland WWTP system often requires significantly more land area and can be relatively expensive to construct. Typically, these systems can not meet the required NYSDEC effluent limits without some conventional WWTP components. Just as desirable topography and other natural factors such as soil type can make constructed wetlands inexpensive to build; undesirable land features increase and land area constraints can significantly increase construction costs. Also it is not believed that a constructed wetland WWTP system has been constructed and is currently operating to the same effluent limits within a 100-mile radius of the project site; thus the proposed project would serve as a “pilot” program. Based on the above information, there would be a significant risk to the proposed project with the incorporation of a constructed wetland WWTP system and therefore, it is the applicant’s opinion that a conventional WWTP is the best solution for the treatment of wastewater effluent.

**Comment 3.4-4-34C:** Regarding Page 1-19, [n]o detail is provided for buffers. Many of the proposed buffers are lawn/turf which has minimal value for wildlife

habitat or for storm water treatment. [Dr. Michael W. Klemens, LLC, Letter, March 18, 2008, Comment C, page 1]

**Response 3.4-4-34C:** A Buffer Management Plan has been developed for the project site and is incorporated into the Habitat Management Plan in Appendix F. Buffer plantings will consist of native plant species and will be planted as wide as possible along sensitive surface water and wetland habitats. All surface waters included in the golf course will have a buffer planting of shoreline plants, terrestrial grasses and wherever possible, low shrubs to provide shelter and forage to resident wildlife.

Furthermore, Audubon International prepared a NRMP for the Golf Course, which was included as Appendix 9.11 in the DEIS. Audubon classifies the upland areas around water bodies as “Special Management Zones” (SMZ) whereby vegetated buffers, no-spraying of any chemical within 25’ (min.) of the water, and an additional 25’ (min.) zone of limited chemical use is required. However, water features do come into play on the golf courses and in those areas tall vegetated buffers could impact the speed of play or impair sight lines. In these areas, the NRMP requires the cut of turfgrass be raised as high as possible (3” min.) in addition to the 50’ no-spray and limited spray zones. Several studies have shown that healthy turf combined with an Integrated Pest Management (IPM) program and appropriate buffers is an excellent filter that cleans water and effectively slows runoff.

The following buffers are proposed:

1. Turf Buffers: All in-play shorelines (Holes #2, #4, #9, #10, #11, #17) will be protected by the SMZ parameters (no-spray and limited management) and will be made up of a fescue mix that will be cut as high as possible and left uncut as long as possible. These could include a vegetated strip of low growing native grasses.
2. Short Native (<1 foot high): Out-of-play shorelines will be a mix of native grasses, forbs and where applicable taller shrub and tree layer will be incorporated. All out-of-play shorelines have been linked to existing habitat types or to one another, creating a network of wildlife corridors. Thus the width of the natural buffers except in the few in-play areas will exceed 50’ and will be void of any maintenance. All tee surrounds will also be seeded with low growing native species and connected to the wildlife corridor network.
3. Native Mix: All areas not developed or are not part of the daily management of the golf course, including all vegetative layers (ground cover, shrubs and tall trees). Audubon is developing a specific plant

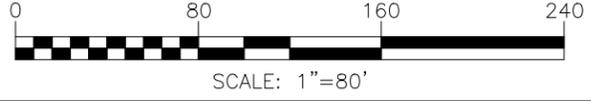
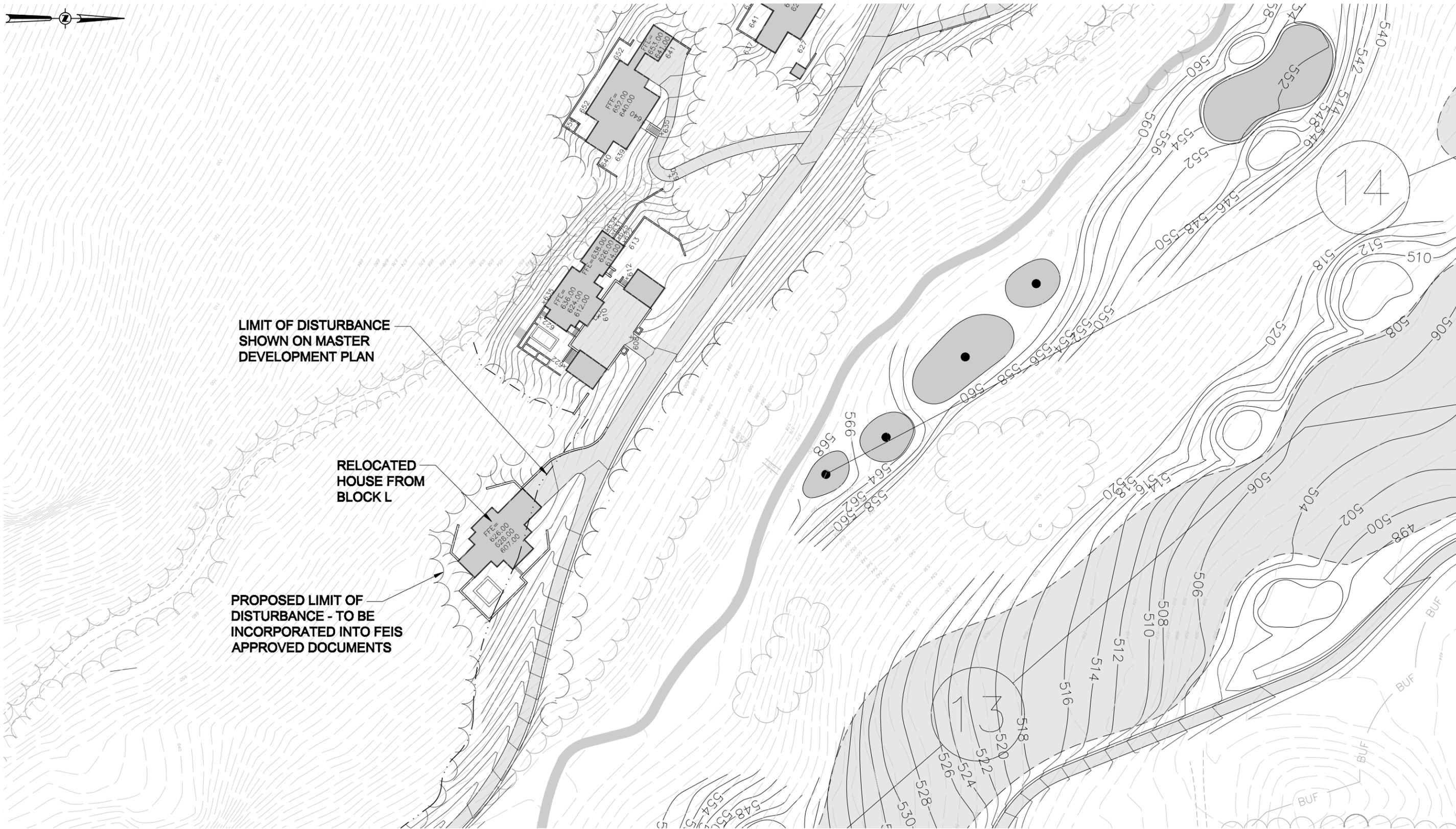
pallet for each of the shorelines and greenspaces but will consist of native species and depending on its location will incorporate all the different vegetation layers.

**Comment 3.4-5-34H:** Regarding DEIS page 3.4-9 and Table 3.4-3. The dusky salamander (*Desmognathus fuscus*) is a regionally rare species in Dutchess County. Once widespread, populations of this species have plummeted throughout the mid-lower Hudson Valley because of the deterioration of stream quality, particularly increases in flashiness, scouring, and thermal alterations associated with development activities. The documentation of this species in the headwaters of area of Stream J is particularly significant on this site. It points to the spring-fed nature of the headwaters area, which is another critical component of dusky salamander habitat. A special conservation zone should be established in that area, and more work is needed to determine the extent of the population within this spring fed seepage area. I would also recommend that the pod of development that is proposed around this wetland area be eliminated or relocated elsewhere. [Dr. Michael W. Klemens, LLC, Letter, March 18, 2008, Comment H, page 2]

**Response 3.4-5-34H:** It is understood that Stream J and its headwater wetland are important dusky salamander habitat. In consultation with the Town's Consultants, the Applicant reevaluated the development around the areas identified by Dr. Klemens as being important for the dusky salamander. Figures 3.4-1 and 3.4-2 illustrate the relocation of buildings so that they are more than 100 feet from the portion of Stream J containing this habitat. Additionally, a Habitat Management Plan (Appendix F) has been prepared and is included with this FEIS. The Plan includes a Buffer Management Plan which addresses buffers that will be created around Stream/Wetland J. This Plan also describes the value of the buffer and how it will be preserved and maintained to enhance the dusky salamander habitat. The development proposed around Stream/Wetland J has been designed so as to avoid the wetland as much as possible, while still accomplishing the project goals.

**Comment 3.4-6-34F:** Regarding DEIS page 3.2-24, vernal pools. While I agree that the Applicant has avoided impacts to Wetland U by the design of the project, I disagree with two unnecessary statements that are included in the text. The steep drop of 350 feet is likely not an impediment to amphibian movements as these lightweight sticky creatures are often able to scale vertical or near vertical surfaces. The discussion that vernal pools are not protected by either State or Federal law is a red herring. The rich biota of vernal pools are a consideration of the Board's SEQRA review, therefore they have full standing to be considered in this Board's review of the proposed project. [Dr. Michael W. Klemens, LLC, Letter, March 18, 2008, Comment F, page 1 and 2]

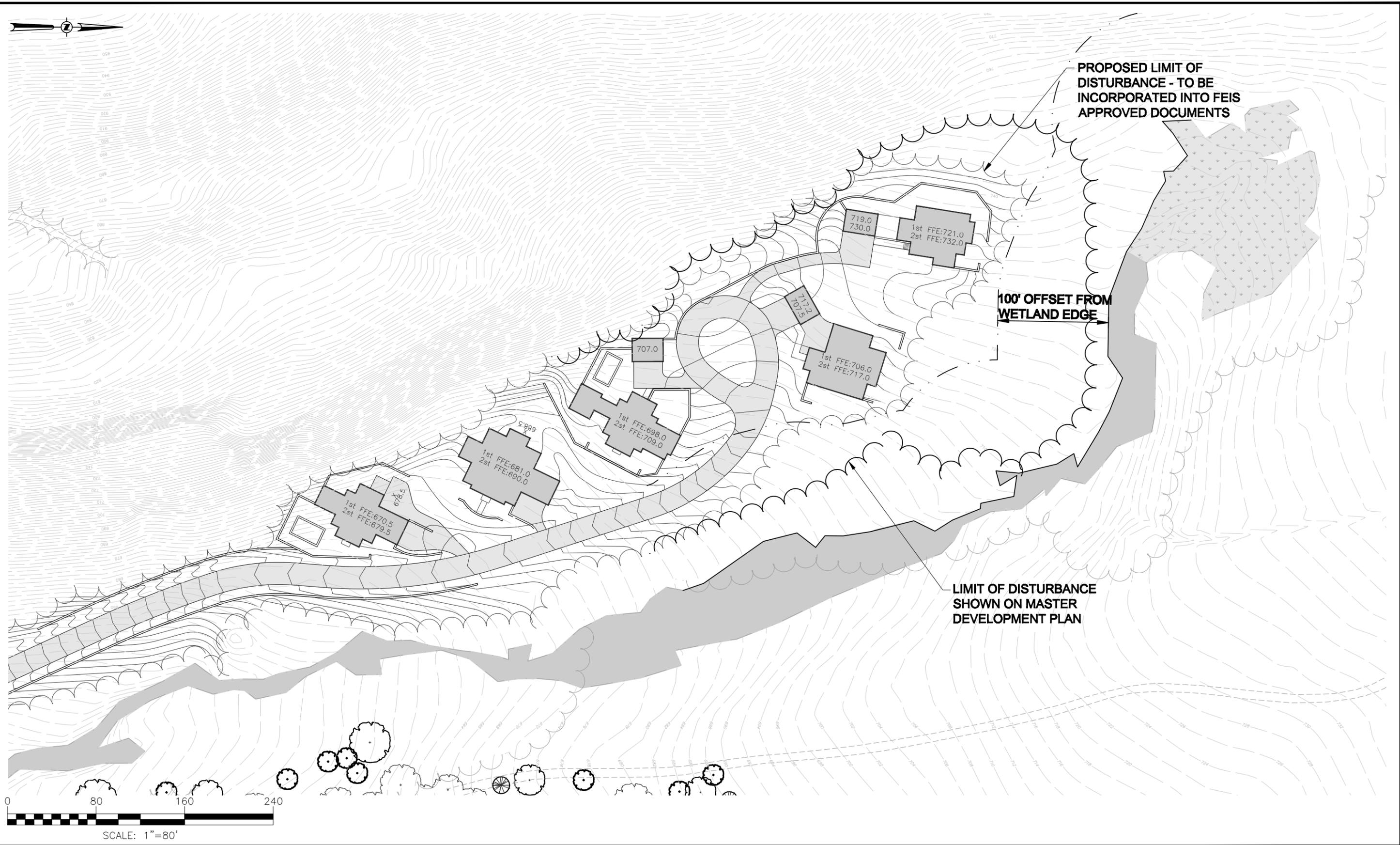
Drawing Name: S:\10400-10499\10454.00\ENG\DWG\410\_MDP\_FIG 3.4-1\_10454-02\_SF HOME SHIFT BLOCK H.dwg Date Printed: Jul 21, 2008, 11:35am



Silo Ridge Resort Community  
Master Development Plan  
**REDUCTION OF SINGLE FAMILY  
HOMES IN BLOCK 'H' AREA**  
Town of Amenia, Dutchess County, New York

SCALE: 1"=80'  
**Figure  
3.4-1**

Drawing Name: S:\10400-10499\10454-00\ENG\DWG\410\_MDP\_FIG\_3.4-2\_10454-02\_SF\_HOME\_SHIFT\_BLOCK\_L.dwg Date Printed: Jul 21, 2008, 11:38am



Silo Ridge Resort Community  
 Master Development Plan  
**REDUCTION OF SINGLE FAMILY HOMES IN BLOCK 'L' AREA**  
 Town of Amenia, Dutchess County, New York

SCALE: 1"=80'  
**Figure 3.4-2**

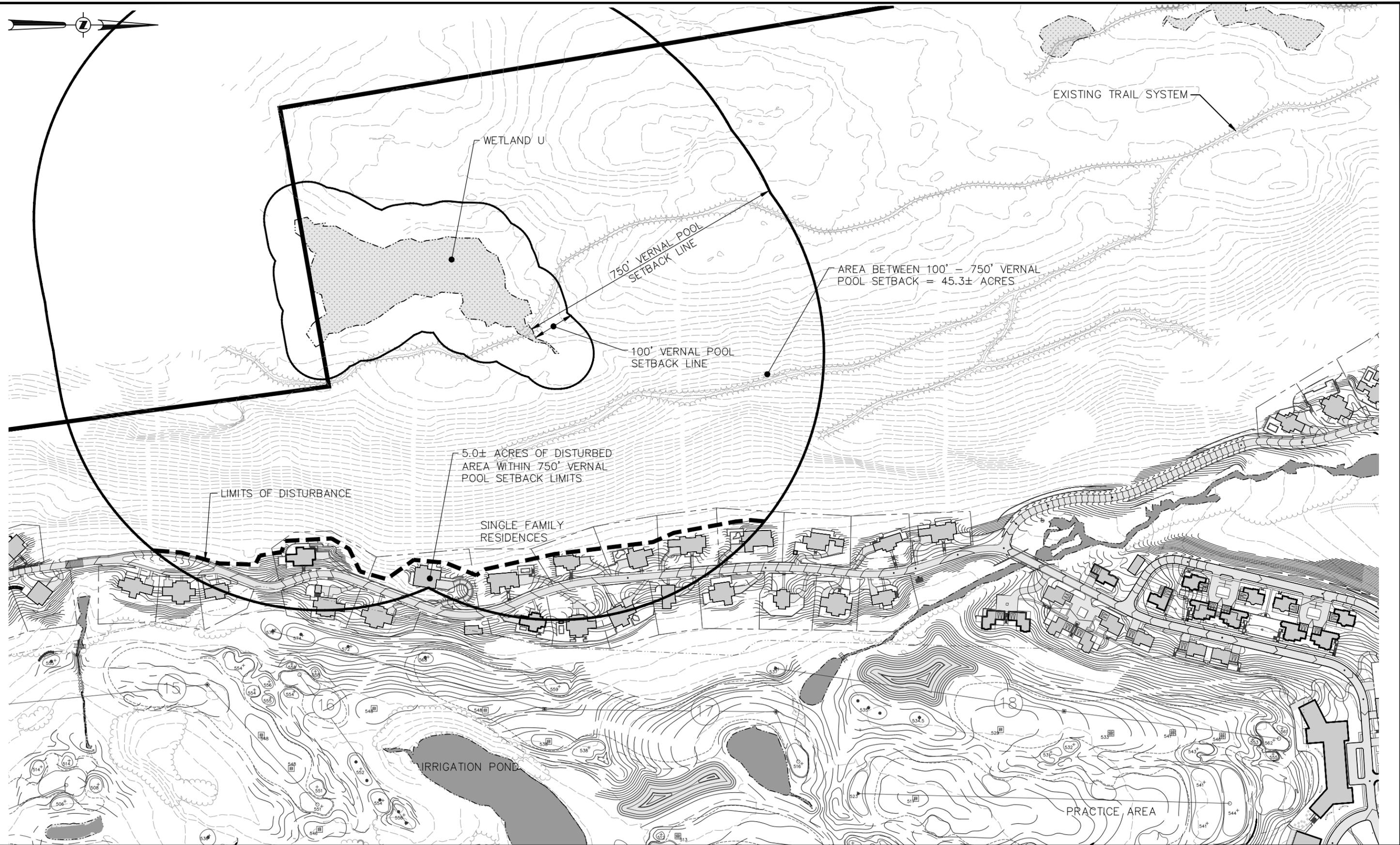
**Response 3.4-6-34F:** The errata section (Section 2.0 of the FEIS) notes that the two statements identified by Dr. Klemens have been removed from the record. Vernal pools fall under the category of “Special Management Zones” and are covered in section 4.1.2.4 of the NRMP (Appendix 9.11 of the DEIS). Figure 3.4-3, “Vernal Pool Setback Map,” illustrates the vernal pool setback zone. There is no development proposed within 100 feet of the vernal pool. There are approximately 45 acres on the project site between 100 and 750 feet from Wetland U. Of these 45± acres, approximately 5 acres (or 11%) will be impacted by development; this development is located at least 500 feet from Wetland U.

**Comment 3.4-7-34G:** Regarding DEIS page 3.2-25, stream and wetland proposed mitigation. There is no discussion or plan to re-vegetate the stream and pond edges with a natural shrubby and herbaceous plant community as recommended by the Applicant’s and Town’s consultants. It is not enough to create planting shelves within ponds or commit to not spraying pesticides and herbicides on the turf within 25 feet of wetlands. I recommend that a minimum of a 25 foot naturally vegetated buffer planted in native shrubs be installed along the edges of all streams and wetlands. In the case of stream, a 25 foot buffer on each bank would result in a 50 foot wide naturally vegetated stream corridor that would provide areas for wildlife movement as well as wildlife habitat, and keep human activities and pollutants out of the wetlands and watercourses. This shrubby buffer would add visual interest, provide wildlife habitat, and clearly indicate where the course ends and the natural habitat and ecosystem begins. [Dr. Michael W. Klemens, LLC, Letter, March 18, 2008, Comment G, page 2]

**Response 3.4-7-34G:** A Habitat Management Plan has been created and is included in Appendix F of this FEIS. This Plan includes a Buffer Management Plan that describes how the buffers surrounding the aquatic resources on the site will be enhanced, maintained, and preserved. The plan also describes improvements to the functions and values of the aquatic resources on the site.

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Silo Ridge Resort Community  
Master Development Plan  
**VERNAL POOL SETBACK MAP**  
Town of Amenia, Dutchess County, New York

SCALE: 1" = 250'  
**Figure 3.4-3**  
JOB NUMBER: 10454.02

**Comment 3.4-8-34I:** Regarding DEIS page 3.4-18, [t]he claim made that the project will preserve approximately 500 acres of the site is misleading. While 230 acres of the site (the hillside and ridge) are to be preserved in a natural and ecologically resonant state, the other so-called preserved areas are the golf course and areas between development nodes and the wetlands. A clear distinction must be made between areas that are to be preserved in a natural state, and those areas that will remain open (free of impervious surface and building) but will have little ecological value (in fact they may serve as the source points of ecological damage through run-off and pollutants). Juggling the numbers in this manner to so gild the lily does not serve any purpose, either for the Applicant or the Town. It leaves both parties open to criticism and I strongly suggest, as I have in the past, that differentiation be made between these types of open space. [Dr. Michael W. Klemens, LLC, Letter, March 18, 2008, Comment I, page 2]

**Response 3.4-8-34I:** The April 2008 MDP differentiates the 536.7 acres of open space as follows: 320.2 acres as Natural Woodland and Wetland, 42.9 acres as Fields, Meadows and Re-vegetated land, and 173.6 acres as Golf-course. The Habitat Management Plan further differentiates these areas and describes the extent of new buffer plantings (Appendix F).

**Comment 3.4-9-34N:** Regarding DEIS, Figure 5-12 and pages 5-48 and 5-49. The examples of enhancement proposed are not ecologically desirable. The marine wall creates a hard edge to the wetland and turf extends right to the wall. The stream restoration depicted in the drawing is actually armoring the stream wall with rip rap. Both these proposals are a way to control water flow and to maximize the use of the land adjacent to these systems for recreational purposes. I recommend natural edges to ponds and wetlands, planted with shrub community, as a far more effective way to stabilize and restore wetlands. This was a concept recommended by Chazen to the Applicant in earlier versions of this document that were reviewed. While I support the concept of planting shelves in ponds, they should also include a vegetated upland buffer strip surround these replanted wetlands. [Dr. Michael W. Klemens, LLC, Letter, March 18, 2008, Comment N, pages 3 and 4]

**Response 3.4-9-34N:** See Response 3.4-7-34G. Also, a marine wall is no longer proposed at the Island Green pond. Instead this will be a limited buffer area adjacent to the golf course. The intent is to have a “soft transition” from golf course to water. Aquatic and edge plantings are proposed with a maintained rough extending variable distances from the water hazards if in-play areas are to be maintained to the water’s edge. This meets the spirit of habitat enhancement for wildlife species, provides limited mitigation of overland runoff in combination with limits on fertilizer/pesticide applications within and adjacent to the rough, and maintains unobstructed in-play areas adjacent to significant hazards on the course.

**Comment 3.4-10-GP75:** It is our understanding Section 3.3 on Vegetation and 3.4 on Wildlife are being reviewed by Dr. Klemens, Ph.D. We have additional comments which resulted from the meeting of the Town's consultants on March 28, 2008. These were prepared by Karen Schneller-McDonald and are related to species of special concern. Attached to these comments is supplemental information regarding species of special concern and how they are regarded in New York State. These comments specifically address bird and herpetological species that are listed by the State or USFWS as species of "concern" with regard to conserving habitat (not endangered/threatened). The species listed in these comments were documented during on-site ecological survey tasks at the site. [Greenplan, Inc., Letter, April 6, 2008, Comment #75, page 13]

**Response 3.4-10-GP75:** The Habitat Management Plan (FEIS Appendix F) addresses site management and the project's potential impacts on resident wildlife. The Habitat Management Plan considers the nesting, foraging, and shelter requirements of each species and provides an approach to meet the life history requirements for as many avian, mammalian and herpetological species as possible. The Plan includes a report on the yearly habitat management activities.

**Comment 3.4-11-GP76:** Nine bird species of conservation concern were noted by Dr. Michael Klemens in his memorandum of March 18, 2008 in which he stated "The Applicant should specifically address for each of the following species the anticipated impacts, and the proposed mitigation measures..." Two of these nine are NYS Special Concern species, and all of them are also listed as NYS Species of Greatest Conservation Need (SGCN), as noted in the attached discussion on species of special concern. The need for this additional information is well documented in the NY State Comprehensive Wildlife Conservation Strategy for New York. [Greenplan, Inc., Letter, April 6, 2008, Comment #76, page 13]

**Response 3.4-11-GP76:** Please refer to Response 3.4-10-GP75.

**Comment 3.4-12-GP77:** In addition, the following species, which are listed in the DEIS as well, are also SGCN species; anticipated impacts and proposed mitigation for all of these species should be included in the FEIS: scarlet Tanager, brown thrasher, wood turtle (also Special Concern NYS), spotted turtle (also Special Concern NYS), eastern box turtle (also Special Concern NYS), northern black racer. [Greenplan, Inc., Letter, April 6, 2008, Comment #77, page 13]

**Response 3.4-12-GP77:** Please refer to Response 3.4-10-GP75.

**Comment 3.4-13-GP78:** The following birds, noted in the DEIS, are listed by Partners in Flight and/or the USFWS Birds of Conservation Concern. The FEIS needs to address these species and their habitat needs: purple finch, chimney swift,

eastern wood-peewee, Baltimore oriole, yellow-bellied sapsucker. [Greenplan, Inc., Letter, April 6, 2008, Comment #78, pages 13-14]

**Response 3.4-13-GP78:** Please refer to Response 3.4-10-GP75.

**Comment 3.4-14-GP79:** The proposed project is likely to produce significant impacts on habitat and sensitive species. The DEIS findings of no significant impact are based on undocumented assumptions. For example, Appendix 9.7.2 states that “The species found onsite are common species that can generally be found in a number of habitats including degraded habitat.” On the contrary, a significant number of species onsite are not common species as noted comments 77 and 78, have specific habitat needs, and are sensitive to development. This needs to be addressed in the FEIS. [Greenplan, Inc., Letter, April 6, 2008, Comment #79, page 14]

**Response 3.4-14-GP79:** Please refer to Response 3.4-10-GP75.

**Comment 3.4-15-GP80:** Even the threatened or endangered species mentioned in the DEIS do not receive adequate consideration. For example, wetland AM-15 and Amenia/Cascade Brook are part of a contiguous system connected to known bog turtle areas. The system may support other rare species such as Hill’s pondweed. Water quality effects on any portion of this system may affect these species; this should be discussed. [Greenplan, Inc., Letter, April 6, 2008, Comment #80, page 14]

**Response 3.4-15-GP80:** A Phase II Bog turtle survey was completed at the site and was described in the Habitat Assessment addendum to the DEIS (Appendix 9.7.2). That Appendix has been revised, reformatted, and reorganized, and is attached to this FEIS (Appendix I). Bog turtles and Hill’s pondweed are known to occur within the wetland complex, which includes NYSDEC Wetland AM-15; however, these species were not identified onsite. The Phase II Bog Turtle Survey was conducted in accordance with guidelines established in the USFWS “Bog Turtle (*Clemmys muhlenbergii*), Northern Population, Recovery Plan” and revisions dated April 2006, and no bog turtles were observed onsite. In addition, Hill’s pondweed was not identified onsite during investigations of the location where it has been documented. However, since the plant has been documented within Wetland AM-15 during the past several years, it is assumed that conditions within the wetland have not changed and that the plant still exists within the wetland.

The reason that bog turtles are not present at the site is likely due to the historic degradation within and immediately surrounding NYSDEC Wetland M-15. Water quality within NYSDEC Wetland AM-15 has been significantly degraded as a result of current and historic alterations. The adjacent Superfund site is known to have discharged halogenated organic

contaminants into the wetland, and plans are currently being developed to remediate the Superfund site. Water level alterations have also occurred within the wetland. Periodic beaver impoundments, former quarry operations, and stormwater runoff from Route 22 have extensively altered the historical hydrologic budget within NYSDEC Wetland AM-15.

Potential water quality impacts to Wetland AM-15 resulting from the project are expected to be minimal. The Habitat Management Plan (Appendix F) includes a Buffer Management Plan which outlines an extensive program for vegetative buffers in the vicinity of NYSDEC Wetland AM-15, Amenia/Cascade Brook, and the on-site aquatic resources discharging to these habitats. The SWPPP also provides additional protections against nutrient and contaminant transport to these waterbodies.

**Comment 3.4-16-GP81:** Four conclusions (Appendix 9.7.2 p. 25-26) are offered to support the DEIS finding that no significant impacts to wildlife will be incurred by the proposed project. This finding is not supported by scientific evidence, and all four conclusions are unfounded assumptions that do not reflect ecological realities. The applicant should discuss species of greatest conservation need, discussion of all impacts to these species, and proposed mitigation. [Greenplan, Inc., Letter, April 6, 2008, Comment #81, page 14]

**Response 3.4-16-GP81:** Please see Response 3.4-10-GP75. The Habitat Management Plan (Appendix F) discusses species of greatest conservation need, impacts to these species, and proposed mitigation.

**Comment 3.4-17-GP82:** While the DEIS mentions a turtle/snake nesting area, there is no discussion of its place in the context of habitat needs of the species that use it. To protect the nesting bank without also protecting necessary travel corridors, for example, constitutes inadequate mitigation. [Greenplan, Inc., Letter, April 6, 2008, Comment #82, page 14]

**Response 3.4-17-GP82:** A Habitat Management Plan has been created and is included in Appendix F. This Plan describes efforts that limit activity between this established nesting area and the closest reptile habitats. If possible, the proposed adjacent stormwater retention basin will be constructed in a manner that could provide additional nesting habitat for resident reptiles. This consideration will be part of the Final SWPPP. Berms with southern or southwesterly exposures will be supplemented with an additional layer of sandy soil to facilitate nest construction for these species.

**Comment 3.4-18-GP83:** The actual habitat value of lawn areas is almost zero. This should be noted in the FEIS. [Greenplan, Inc., Letter, April 6, 2008, Comment #83, page 14]

**Response 3.4-18-GP83:** Lawns do provide some habitat for insectivorous and seed eating birds and mammals (and their predators). Additional habitat is found in the 320.2 acres preserved as natural woodland and wetland, and the 42.9 acres preserved as fields, meadows, and revegetated land.

**Comment 3.4-19-33M:** The existing boundary, or interface between the forested upland and the open areas at the base of the hillsides may be a rich environment where various types of wildlife that frequent both the forest and the fields congregate. The density of development along this slope should be lessened in order to preserve this habitat. The effect on wildlife of putting in a new access road from Route 22 near the large DEC wetland has not been assessed. Roads open up pathways for nuisance birds and mammals into the forest and the road itself becomes a deathtrap for animals crossing it, particularly amphibians who may be migrating to the wetland from the woodland during the breeding season. The DEIS should assess these effects and look for migrations. [David Reagon, Letter, March 20, 2008, Comment M, page 9]

**Response 3.4-19-33M:** See Response 3.4-10-GP75. A Habitat Management Plan has been created and is included in Appendix F of this FEIS. This Plan includes a Buffer Management Plan that addresses the enhancement, maintenance, and preservation of the habitat transition areas.

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