4.0 ADVERSE ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROJECT IS IMPLEMENTED

Impacts to natural and physical resources were minimized to the extent possible. The steps taken and the resources used are outlined below. Impacts that cannot be avoided include: impacts to land and impacts to visual resources.

Impacts to Land

The proposed project will have impacts to land including: impacts from grading activities, impacts from site development, and impacts to prime agricultural soils.

The proposed project will place development on approximately 48.54 acres of soils which are currently designated as prime agricultural land. A total of 223.81 acres of prime agricultural soils are on site; all remaining prime agricultural soils, 175.27 acres, will be placed in a conservation easement.

Impacts to surface geology created primarily by site grading are estimated to occur in 40 acres of the project site, and are primarily attributed to cuts and fills for the installation of roadways and stormwater management features, such as detention basins and swales. Additionally there will be excavation for foundations for the houses, as well as fills required for the equestrian center and the relocation of Barn 1. The proposed development layout avoids construction in areas with slopes greater than 30% which meet the Town's definition of steep slopes, but will impact areas 5,000 square feet of non-contiguous slopes of greater than 25%. Site grading follows the contours of the land to the extent possible, with cuts limited to an average of 4 feet at house sites.

Construction and long-term operation and maintenance will utilize stormwater management to reduce potential impacts to site surface geology. During construction, the temporary stormwater management requirements of the NYSDEC's SPDES General Permit will be implemented. These controls include phasing construction activities to keep disturbances of the site soils to less than five acres at any one time, and the use of temporary stormwater management controls including: stripping, stockpiling and seeding topsoil for post construction reclamation; installation of erosion control measures such as the placement of silt fence and hay bales; sedimentation traps and detention basins; and other measures as appropriate. Implementation of stormwater management controls during construction will minimize impacts to surface geology to the extent possible.

The proposed project will also result in a total of 17.97 acres of impervious area on the site at full build out. The increased impervious area will increase the runoff volume. Post-construction, the long term stormwater management controls in place will include swales, infiltration basins, and, detention ponds. The use of infiltration practices will return stormwater, which could potentially generate erosion and sedimentation problems in surface water resources, to the ground and aid in recharge of the shallow aquifer. Post-construction stormwater management will be developed for small groups of houses to provide flexibility in stormwater management and keep drainage structures small and unobtrusive in the landscape. The primary objective of

these measures is to manage the increased stormwater runoff created by the development through the aforementioned control measures thereby slowing the velocity of stormwater to below erosive levels, holding stormwater in detention to improve water quality, and discharging stormwater volumes slowly over a period of time. These measures protect the surface geology from erosion and minimize potential impacts to the extent possible.

Impacts to Visual Resources

The proposed project will impact the visual resources in the Town of Amenia by placing residences on land that is currently agricultural fields. The SPO is shown in Figure 9.A, and in that drawing, the following can be observed: 31 of the 33 houses and all of the road in Neighborhood #1 fall within the SPO district, 24 of the 26 houses and all of the road in Neighborhood #2 fall within the SPO district, one of the 16 houses and approximately 20% of the road in Neighborhood #3 fall within the SPO district, and eight out of the 36 houses and approximately 20% of the road in Neighborhood #4 fall within the SPO district.

The professional siting and design, in concert with maintaining and augmenting the existing vegetation and topography of the site, mitigates the impacts to the extent possible by locating the development in compact linear neighborhoods; using existing and reconstructed hedgerows as screening; constructing homes with non-specular, earth-tone colored materials. Additionally, the COA will control and manage the exterior environment to eliminate clutter and maintain the site's rural character.

Impacts to Water Resources

The proposed project will result in the filling of 0.017 acres of federally regulated wetlands. An ACOE Nationwide Permit #29 will be obtained for the impacts.

The proposed project will result in the disturbance of 40 linear feet of stream bank of the stream B, CONN-15-11-2-2-1. An open bottom culvert will be used to maintain the existing channel.

The proposed project will result in 1 house being located within the SCO, but outside of the 100-foot set back, for stream B, CONN 15-11-2-2-1.

The proposed project will result in the additional consumption of up to 63,020 gpd of groundwater resources. Aquifer recharge calculations indicate that recharge will be approximately five times greater than use (refer to HDR/LMS report, Appendix N-2).